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This report contains a brief summary of 109 innovative instructional programs reported as underway or anticipated by 14 school districts participating in the Educational System for the Seventies (ES-70) program. The following information is provided in each program summary: (1) Title of program, (2) academic and vocational areas involved, (3) planning time and personal requirements, (4) number and grade level of students enrolled in the program, (5) name and address of resource person to contact for further information, and (6) a brief description of the program including objectives, progress, staffing, use of technological aids and resource materials, and evaluation results. A related document is EA 002 515. (JH)

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OE-BR
Interim Report

PRIMARY NETWORK INNOVATIONS

FIRST ANNUAL REPORT
MAY, 1968



Prepared under the supervision of the
ES '70 EXECUTIVE COMMITTEE

by

E. F. Shelley and Company, Inc.
New York - Washington

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INTRODUCTION

One of the more significant characteristics of a school system, responsive to community and student needs, is the innovative character of the instructional program. In selecting local school districts from around the United States for participation in the ES'70 program, the extent of which innovations were evident was a major selection criteria.

In the spring of 1968, local district coordinators were asked to submit a list of innovative programs underway or anticipated in their local communities. This publication provides a comprehensive summary of those innovations reported prior to May 1, 1968. Further, it provides appropriate administrative and instructional personnel of the ES'70 network, interested in specific programs, with the name and address of the person directly responsible; thus enabling them to secure further information.

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Innovations Report Format

The following information on innovative programs reported by member districts of the ES'70 network has been summarized according to the format below.

City - State

Title of the Program

Academic disciplines involved

Number & Grade Level of students enrolled in the program

Vocational areas involved

Planning time required

Planning team membership

Paragraph I: Brief description of:

Program purposes

Progress to date

Number and status of personnel involved

Technological aids

Texts and other resource materials used.

Paragraph II:

Status of evaluative information

Recommendations for replication.

Resource person for further information.

Atlanta, Georgia

Changing Culture - 8th Grade Social Studies

Hist., Poli. Sci., Eco., Sociology
(Sociology of work)

11,000-12,000: 8th Gr.
4 yrs-planning & research

Teachers & coordinators, specialists in learning theory.

This program was planned to introduce students to social processes of interaction in human relationships and the concepts of ecology, past and present, and to involve students in the assessment of social problems of the future. Assessment has been constant since the project's inception three years ago, results of which are available. Central concepts and related materials are now being reassessed for final reorganization into three quarter courses: Georgia culture, Georgia History and The City. Involved in the program were two supervisors, forty-two department heads, two hundred teachers, ten teacher interns and thirty student teachers. Various media were used in the process of instruction, as well as the texts "Changing Culture Books I and II" and a variety of supplementary materials. Further information may be obtained from:

Mrs. Jeannette B. Moon
Atlanta Schools Instructional Center
2930 Forrest Hill Drive, S. W.
Atlanta, Georgia 30315
Tel: - 761-5411 Ext. 236

Atlanta, Georgia

Communication Skills Laboratories

Communication Skills (English)	Approx. 1,700
None	5 Months
Asst. Supt. for Instruction, Co-ordinator of Reading, Co-ordinator of Foreign Languages for Atlanta, public school - teachers in summer workshop which preceded the program	

This program was planned to teach the language arts skills of listening, speaking, reading and writing to students with high potential and low achievement scores. During the 1965-1966 operation of the program, the reading level of average lab students was increased one year, five months. The CSL project is to be incorporated into the regular language arts program in the Atlanta Public Schools. Emphasis is placed not on reading alone but on the four language arts skills of listening, speaking, reading and writing. Actively engaged in the program were two supervisors, 14 dept. heads, all English teachers in the fourteen schools with lab, language arts and social studies teachers, and six student teachers. Many text and resource materials were used in implementing the program. For example: multi-ethnic texts; low vocabulary, high interest library materials; Language Master Cards and tape recorder tapes constructed by the staff for the teaching of standard English as a second dialect. Technological aids used were: Language Masters, tachistopic devices such as Tach-X and Perceptomatic reading pacers, filmstrips projectors, movie and opaque projectors.

While information is not yet available for distribution, an evaluation is being conducted. For those attempting to replicate, a brief description is available upon request. Visitors have been numerous and are welcome. Arrangements can be made by mail with the co-ordinator named below.

Mrs. Eunice H. Sims
Co-ordinator of Communications Skills Laboratories Program
2930 Forrest Hill Drive, S.W.
Atlanta, Georgia 30315
Tel: - 761-5411, Ext. 292

Atlanta, Georgia

Curriculum Revision Based on Behavioral Objectives
for Twelve-Month, Four-Quarter Schools

All academic disciplines	About 40,000 8-12
All Vocational Areas	About 6 months
Instructional, Research, Guidance and Administrative Personnel	

Funds were requested for consultative assistance for an in-service teacher re-education program to be conducted over an eighteen month period. The entire corps of secondary teachers will participate in a complete curriculum revision-improvement program within the framework of a quarterly plan of operation. Both tentative curriculum evaluation and course of study development have been underway for more than a year. Plans have been completed for a more comprehensive and detailed program analysis and careful development of a truly comprehensive curriculum. Presently the system is awaiting approval of funds by the Bureau of Research U.S.O.E. 15+ supervisors, 100+ department heads and 2000+ teachers will implement this program. The nature of the resource material and educational technology has not yet been determined.

Schools contemplating a similar type of curriculum development might well profit by a close look at Atlanta's progress and the mistakes that have come to light.

For further information contact:

Dr. James O. Knuckles, Director
ES'70s Program, Atlanta Public Schools
2930 Forrest Hill Drive, S.W.
Atlanta, Georgia 30315
Tel: 404 761-5411

Atlanta, Georgia

ES '70's Network Schools

All academic disciplines	About 1,000 Students: Gr. 8-12
All vocational areas	About 6 months
Instruction, Research Guidance, Administrative Personnel	

This program was planned to research and restructure the secondary curriculum so that it may become a pupil-centered, life related comprehensive program, which would wisely use modern technology and individualized instruction. Planning and preparation for comprehensive, in-dept curriculum study and modification are currently in process with 12 Supervisors, 10 department heads, and 50-60 teachers participating. Employment of a variety of technological aids is anticipated. Texts and resource materials to be used will be developed.

The program is still in a developmental stage; evaluation will be conducted at a later stage. It is recommended that other anticipating to replicate the program should engage in careful "self-study" and/or evaluation of the effectiveness of the current local program, then proceed toward finding better and more effective ways and means of educating children. Further information may be obtained from:

Mr. James O. Knuckles, Director
ES '70's Program
Atlanta Public Schools
2930 Forrest Hill Drive, S.W.
Atlanta, Georgia 30315
Tel: 404 - 761-5411

Atlanta, Georgia

Health Education & Health Occupational Training Program

No academic disciplines directly involved 89 directly; 15 indirectly
Health Services 6 months
Professional medical, school administration & health educators

The alarming shortage of personnel in the medical & para-medical fields throughout the country is well known. This program is an effort to help alleviate this increasing shortage, by acquainting students with the existing need and by fostering an interest in health education and health occupations. Approximately 90 students who expressed an interest in the field, were selected for the experimental phase. They visited various health agencies, listened to talks, viewed films and actually worked in the field of their interest. The beginning phase of the program will be more or less general, until specific interest or aptitude for a particular field is shown. Then the program will be channeled in the direction of special interests. The staff conducting the program consists of a Director-Counselor, teacher, and teacher-nurse. Health personnel from a variety of health agencies have been involved. A variety of career materials was used. These were disseminated through recordings, films, pamphlets, and seminars, etc, involving health personnel.

Evaluation of the program is underway; however, information is not available for distribution. Recommendations for others attempting to replicate this program include the following:

1. Establish an overview of the project.
2. Become acquainted with administrative services and policies of the school system.
3. Ascertain health manpower needs at national and local levels with major emphasis, at first, on local needs.
4. Identify health agencies and personnel to be utilized in implementation of project.
5. Develop criteria for selecting participants.
6. Establish contact with high school personnel.
7. Present framework for implementation to school and health personnel.

Further information may be obtained from:

Mrs. Beulah J. Tipton
Instructional Services Center
2930 Forrest Hill Drive, S. W.
Atlanta, Georgia 30315

Atlanta, Georgia

Human Relations Approach to Gaining & Maintaining Employment

Language Development, Mathematics

300-800 Students: K-7

Pre-voc., Gen. Shop, Home Ec. Lab. & Cler. Lab. *

*

The general goal of this project is to study the effects which the Human Relations approach to Basic and Prevocational training has upon certain dependent variables. The emphasis of the program is on developing human relations skills and positive attitudes toward work. Stress is also placed on helping trainees achieve an efficient level of oral and written communication. The majority of those involved in the program are of the opinion that it is worthwhile and that it will eventually benefit them financially and improve their family conditions. Currently implementing this program are: one director, one curriculum coordinator, 15 teachers, 1 research assistant, 6 clerk-typists, 1 statistician, 2 social workers, and 2 job developers. Overhead projectors, opaque projectors, Language Masters, controlled readers, and Tach X were used in the program, as well as the Rochester Reading Series.

Evaluation of the program is underway. It is recommended that others attempting to replicate realize that an attempt to relate to persons with a low achievement level requires sufficient time to insure the achievement of long lasting gains. For further information contact:

Thomas W. Hinds, Director
756 West Peachtree Street, N.E.
Atlanta, Georgia 30308

Atlanta, Georgia

Improving the Instructional Competencies of
Teachers in the Communication Skills

English
No Vocational Areas
* ---

4637 Students K-7 (Limited 8th Gr. participation)
Summer 1965

Twenty-four reading specialists known as Lead Reading Teachers assist the reading program by providing diagnostic, corrective and developmental reading services. As a result of a general inability to read, many disadvantaged children are unable to profit from typical school experiences. Since the ratio of these children is large in relation to the number of available reading teachers, an attempt is being made to improve student reading skills indirectly, by providing the regular classroom teacher with expert consultation in reading skill development. The project has generated a great deal of enthusiasm among regular teachers. Pupils who are exposed to the program seem to acquire a better self-image. Their attitude towards reading aloud becomes more positive, and their language achievement improves. (Language achievement was measured by the California Test of Mental Maturity - language I.Q. Scale). 24 supervisors and 2 department heads were involved in the program. Some basic equipment such as language masters, listening stations, tape recorders, copying machines, record players and tachistopic devices were used in the project.

Presently, an evaluation of the program's effectiveness is underway, and evaluative information is being prepared for distribution. Recommendations for others attempting to replicate this program include the following:

- 1) Lead reading teachers should receive extensive training in how to work with faculties.
- 2) Administrators should be familiar with the objectives and practices of the program and should be included in planning and implementation.
- 3) The LRT should be freed of classroom teaching and other school responsibilities in order that she may concentrate on assisting the staff in the co-ordination and facilitation of efforts to improve the reading program.

Further information may be obtained from:

Miss Anne Wright
Elementary School Co-ordinator
Instructional Services Center
Atlanta Public Schools
Atlanta, Georgia 30315

Atlanta, Georgia

Individualized Instruction in Technical Science, Title III

Science, Mathematics	About 1000 8-12
Industrial Arts	About 3 months
Instructional, Research and Administrative Personnel	

The Atlanta School System proposes to develop a pupil-centered individualized curriculum in the area of Technical Science, drawing mainly from Industrial Arts and utilizing the inherent practical relationship of both science and mathematics. This proposal has been submitted; basic planning has been completed, and announcement by U.S.O.E. is awaited. Involved in implementing this program will be six supervisors, ten department heads and about thirty teachers. Texts, resources and technological aids to be used have not yet been determined; many will be developed within the framework of the program.

Districts contemplating a similar curriculum plan may consult the Atlanta proposal, follow the successes and failures of the project, making necessary and locally relevant modifications.

For further information contact:

Dr. James O. Knuckles (Interim Director)
ES '70s Program, Atlanta Public Schools
2930 Forrest Hill Drive., S. W.
Atlanta, Georgia 30315
Tel: -404-761-5411

Atlanta, Georgia

Learning Resources Center for Improving Teacher Education

All academic disciplines 8,000 student K-12
Home Economics, Industrial Arts One Summer
Representatives of all personnel in the system participated in planning

This program was planned to provide for an effective orientation and induction of beginning teachers into the instructional program of a large system. It intends also to provide opportunity and encouragement for the professional growth of all teachers in the school system and at the same time to decrease the teacher drop-out rate. Special graduate programs have been set up for thirty five intern teachers, and fifteen instructional teams have been established in seven elementary, seven secondary and one middle school location. There has, in addition, been emphasis on the identification and utilization within the curriculum of cultural and business, industrial, human and physical resources throughout the metropolitan area. Currently involved in implementing this program are: 3 Supervisors, 15 department heads, 15 lead teachers, 15 para-professionals, 90 teacher interns, and 20 staff teachers. Various texts adopted by the State Textbook Commission and the Atlanta School System are in use; other sources include programmed and simulation materials. Audio-visual media are used extensively, especially for the humanities; physical resources throughout the metropolitan area are employed for study trips.

Evaluation of the program is underway, and information is available for distribution. Recommendations for other attempting to replicate this program include the following:

- 1) Intern teachers wishing to participate in instructional team programs should be carefully identified.
- 2) Those selected must be willing to work together in a team relationship and be interested in pursuing a Master's degree program.
- 3) Administrators who have instructional teams assigned to their schools must have adequate in-service planning experiences to insure understanding and success of the program.

Further information may be obtained from:

Lucile Jordan
Instructional Services Center
2930 Forrest University Drive, S.W.
Atlanta, Georgia 30315
Tel. 761-5411 Ext. 294

Atlanta, Georgia

OCCUPATIONAL MATERIALS PROJECT

Eng., S.S., Music, Arith. 10000 Students Gr 3-8
Health Occups., Communications, Technology, 2 years
Trades, Professions such as teaching, etc.
Adm. Staff, research assts., guidance specialists, teachers

Objectives of this program are to disseminate occupational information and ultimately to formulate models for preparing occupational materials for pupils in grades 3-8, in order to motivate pupils to remain in high school and thereafter seek additional training. The school has compiled a bibliography which is a survey of existing materials; an additional bibliography of films is being collected. The total compilation of source material will include a survey of the interests and occupational knowledge of 1600 students as well as tapings of 150 interviews with children, parents, workers, and a slide presentation "The Law in Your Life." One supervisor, 16 principals, approximately 100 teachers and 3 para professionals were involved in implementing the program. Various types of audio-visual equipment were used throughout. Following is a list of texts used:

Our Working World (SRA)
Planning My Future (Natl. Forum Found.)
Cities At Work, Occup. Inform - Hoppock
Man in a World at Work - Henry Borow, Ed.
Labor Market Reports, Chamber of Commerce Reports, Etc.
Occup. Inform. in Elem. School - Willa Norris
Dictionary of Occup. Titles

No evaluation of the program's effectiveness has been made. However the following recommendations were made for others attempting to replicate:

1. Involve children and teachers as early as possible for pragmatic approach to developing materials.
2. Librarians are an extremely valuable source of information.

Responsible for program:

Dr. Helen E. Cook, Instructional Services Center
2930 Forrest Hill Dr. S.W. Atlanta, Ga., 30315
Tel (404) 761-5411 Ext. 283

Atlanta, Georgia

Teacher Corps

Soc., Psych., Math., Nat. Sci., Eng. 36 Students: cand. for M. Ed.
* 2 Years
Prof. Educators: Universities, Public Schools, State Ed. Dept., U.S.O.E.

An attempt was made to reach and teach the children of poverty areas by recruiting graduate students to work towards an M. Ed. degree in Early Childhood Education. Two supervisors, five department heads, 6 teachers and 36 teacher interns assisted with the program. A wide variety of appropriate resources and texts were used.

The first Cycle Interns will receive their degrees in June 1968. Second Cycle Interns have completed pre-service and are working smoothly in the in-service program; they expect to be graduated in June 1969. Proposal plans have been submitted for the Third Cycle.

An evaluation of the effectiveness of the program is underway; however no information is ready for distribution as yet, and no recommendations have been made for others attempting to replicate.

Responsible for program:

Dr. Rhoda Spruce Newman (Dir.)
2930 Forrest Hill Drive S.W.
Atlanta, Georgia 30315

Dr. Cornelia G. Eldredge (Co. Dir.)
Same address

Bloomfield Hills, Michigan

K-12 Continuous - Progress Curriculum

All academic disciplines	2,500 K-12; 700 in ES'70 H.S.
All vocational areas, separately and integrated with academic	Three years planning time
ES'70 coordinator staff, University Consultants	

To capitalize on the unique abilities, aptitudes and interests of boys and girls, the Bloomfield Hills schools have developed and initiated an innovative K-12 sequential curriculum, organized in terms of carefully defined behavioral objectives. The educational programs are tailored precisely according to each student's individual needs and are established in three schools. Various consultants are working with the district to construct objectives in the affective and psychomotor domains; ETS will also be involved. In conjunction with Wayne State University a dual appointment is planned: Wayne State for research, MOREL Laboratory for in-service experimentation; University of Michigan for COPED involvement in the change process, and Mott Foundation for the total educational program for all members of the community.

At present, personnel involved in the implementing of the program include 16 supervisors, 103 teachers, 1 teacher intern and 14 student teachers. Actually implementation has been limited to "human resources", although automatic data-processing facilities are anticipated. Many student and teacher packets of material have been prepared locally. All good "off the shelf" materials and audio-visual materials of which the district has been apprised have been integrated in order to develop a multi-dimensional approach.

The National Assessment Program and Dr. John Easter of Stanford University are evaluating the program, but information is not yet available for distribution. Those responsible for development of the program feel previous knowledge, experience and background in the art of individualizing education are essential for replication. For further information please contact:

Robert E. Boston
Assistant Superintendent for Curriculum
and ES'70 Coordinator

Phone (313) 332-0445

Dr. Marjory E. Jacobson
Coordinator for Federal Programs
Phone (313) 332-9286

4175 Andover Road
Bloomfield Hills, Michigan 48013

Boulder, Colorado

Adaptive Physical Education

Phys. Educ.	75 (Soph. & Junior)
No voc. areas	10 hours
Boulder County Med. Society, Univ. of Colorado P.E. Dept., Dist.	
P.E. Coordinator	

This course has been developed to provide some type of physical education activities and exercise for those who are handicapped and unable to take regular physical education classes. Physical skills are learned despite considerable limitation. Students are eager to lessen the effects of their handicaps and to return to regular classes. Texts and resource materials include all physical education books on adaptive physical education. Implementing the program are 2 supervisors, 1 department head, 8 teachers, and 2 student teachers.

An evaluation is underway with information available for distribution. In order to initiate similar classes effectively there must be assurance of available facilities and equipment. Students must obtain medical statements in order to enroll in the special class and when they are ready should return to a regular physical education program.

Information on program available from -

Mr. Ed Steinbrecher, School Dist. Re 2,
P.O. Box 186
Boulder, Colorado 80302
Phone: 442-6931

Mr. Wendell Greer
Principal Boulder High School
Boulder, Colorado 80302
Tel. 443-2430

Mr. Ken Furman
P. E. Teacher
Boulder High School
Boulder, Colorado 80302
Tel. 443-2430

Boulder, Colorado

Basic Electronics

Physics

Grades 10-12

Voc. areas rel. to Elec. Eng.

9 Months - Spare Time

Instructors from Boulder High School and Vocation Technical Center

This is a three pronged program designed to give students background in the area of electronics for college entrance in electrical engineering, for entrance into a vocational training school, and for leisure time activity. It will go into effect in September, 1968. Two instructors have been involved and they plan to use Electricity and Electronics by Howard Gerrish as the test and to supplement this with a laboratory manual Learning Experiences in Electronics by the same author.

No evaluation of this course is possible at this time. Recommendations for others attempting to replicate this innovation include:

1. Spend more time visiting schools with similar philosophies and objectives.
2. Secure advice from experienced supervisors, department heads and other personnel.
3. Involve other members of the faculty and community in planning and evaluating this course.

Further information may be secured from:

Joe Sheely
1604 Arapahoe
Boulder High School
Boulder, Colorado 80302

Boulder, Colorado

English Department Quarter Course Electives

Language Arts: reading, writing discussion 500 Students; Grades 11-12
No vocational areas involved One Year
English teachers, counselors, administrators, District language arts
Supervisor, Asst. Sup't., ES '70 coordinator

A new English curriculum has been designed to make English alive through diversity of course offerings and flexibility of approach. It fosters democratic processes by allowing students to make choices where they are mature enough to do so. The students start at their present ability level and at their own speed develop skills in reading, writing, speaking and listening. The program provides a challenge for students with varied backgrounds, abilities and future plans. Teachers are encouraged to use their talents to develop diversity of approach and to vary course offerings. The 1967-68 pilot program offered nine quarter courses elected by approximately 150 seniors. The program will be expanded to thirteen courses next year in a non-graded situation with approximately 350 juniors and seniors enrolled. Paperbacks were heavily relied upon as source material.

Both teacher and student evaluations have been enthusiastic but formal results of the evaluation project are not yet available. Recommendations for those contemplating a similar project follow:

- 1) An extensive program of individual advising based on such data as reading level, test scores and teacher evaluation is necessary to insure appropriate choices on the part of the student. In this program such advising is done by the student's present English teacher.
- 2) Scheduling is difficult to handle without data processing.
- 3) Careful selection of paperback texts is time consuming, but crucial.

Further information may be obtained from:

(Mrs.) Joanne E. Arnold
English Dept. Chairman
Boulder High School
16 Arapahoe Avenue
Boulder, Colo. 80302
Tel. (303) 442-2430

Boulder, Colorado

The Family

Psychology, Sociology, Economics, Physiology
No vocational involvement at present
Home economics teachers

* Grade 12
*

This course attempts to study the American family today and its dominant characteristics - how it functions as a unit and meets the needs of its individual members. Central issues include the change in family structure and the individual roles therein, and the problem of adaptation to changing needs. Also included are studies of individual variation in the development of personal characteristics and of problems which occur as the family progresses through various phases of its growth. Special emphasis is placed on mate selection, the prenatal stage, child development in the pre-school years, nutritional needs of the family and the management of time, energy and other resources in meeting family goals. Originally, a one semester course open only to senior girls, it has now expanded to a year's course open also to senior boys. The department chairman, medical personnel, social workers and other persons from the community serve as prime resources for instruction.

No formal evaluation has been conducted as yet, but experience to date indicates that the following are essential to the success of this course:

- 1) time for planning and developing teacher materials.
- 2) money for field trips, films, visual aids, publications.
- 3) released-time for teachers to visit and observe similar programs in other schools.
- 4) adequate opportunity to publicize the course among parents and teachers.

For additional information, contact:

Mrs. Ura M. Riethmayer
Home Economics Department Chairman
Boulder High School, 1604 Arapahoe Avenue
Boulder, Colorado 80302
Phone: 303-442-2430

Boulder, Colorado

House Design and Interior Decoration

Art, Sociology, Psychology

*Grades 10, 11, 12

*

*

Home Economics teachers throughout the district

A new course has been developed which focuses on social, health, psychological, economic and aesthetic needs of the family in relation to housing. Standards, trends and costs are considered as well as legal aspects. Principles of architecture and interior design are studied in relation to the application of line, form, texture and color. Much of the class procedure involves individual projects and discussions. As house design principles are studied, students create their original floor designs. Exterior designs are developed and judged according to functionalism and principles of design. Plans for interior decoration are created applying principles of furniture, texture and color selection. Only one department chairman and one teacher are currently implementing this newly developed course; they rely on many current journals rather than standard texts. Moreover architects, interior decorators and others from the community contribute to the instruction.

No evaluation of the course has yet been made. Those wishing to initiate a similar course of study are advised to develop special competence in architecture, drawing and interior design. An advisory committee of architects, welfare workers, city planners and other relevant professionals can be enormously helpful. An additional necessity is an adequate budget for field trips and illustrative materials.

For additional information contact:

Mrs. Ura M. Riethmayer
Home Economics Department Chairman
Boulder High School
Boulder, Colorado 80302
303 442-2430

Boulder, Colorado

Latin American History in Spanish

Spanish & Social Studies

*

10-15, Grade 11-12

"Many Uncounted Hours"

Course Teacher: Mrs. Olga Hoffman

This course was developed so that students may learn to use mastery of Spanish to acquire knowledge in the field of Latin-American history and culture. It will be taught for the first time in fall of 1968. Slides, the opaque projector and movies are standard technological resources. Texts are

Latino-America, El Continente de Siete Colores -
German Arciniegas - Harcourt, Brace

Ibero America, Su Historia y Su Cultura - Holt, Rinehart

and magazines such as "A Portes Politica Nuevo Mundo." Only one teacher and one teacher intern will conduct this course.

It is recommended that the course be taught from the point of view of the people studied, in this case Latin-Americans. An attempt is made to see them live and develop with their successes and failures. Their trends and thinking, art and music are studied.

Information from:

Mrs. Olga Hoffman
Teacher of Spanish Language
Boulder High School
1604 Arapahoe Avenue
Boulder, Colorado 80203

- or -

William H. Reed
ES '70 Coordinator
Same address
Tel.: 303-442-2430

Boulder, Colorado

Mathematics Calculating Center and Laboratory

Mathematics, Chemistry, Physics	1180 Students: Grades 10-12
No vocational areas	3 years
District mathematics supervisor and Boulder H.S. Math. teachers	

A mathematics resource center has been established to provide tools for all mathematics students and to teach insight into the subject without unnecessary drudgery. A mathematics library of technical and general interest books is also provided. Thus the center is well equipped to stimulate and provide opportunity for experimentation, model building and the like. In August, 1967 the District Math Supervisor and three teachers organized and wrote study guides for the Math. department. All teachers took an 8-hour course in the use of calculators, as did all math students in Sept. & Oct. 1967. During the rest of this school year, students have used the machines in problem solving for math, chemistry and physics. Currently one district supervisor, one department chairman, eight teachers and two student teachers are implementing this program. Technological equipment includes eight Olivetti calculators, one Marchant 416 S, plus model slide rules, math models, games, etc. In addition to the supplemental library, sources include texts from the various Boulder H.S. math courses plus a manual on the operation of Olivetti calculators written by a District Mathematics Supervisor and tested by a H.S. math teacher.

The rate of use of the MCCL room is being tabulated, and teachers are using the machines in courses as an aid. At the end of the year a formal departmental assessment of the MCCL will be made, but subjective reactions are available now for those interested. It is recommended that more time be spent in writing special units before students receive actual instruction. Moreover, teachers should be allotted adequate time to become thoroughly acquainted with the operation of the machine in the MCCL room. For further information contact:

Mr. Glenn Gilbert, Supvsr. of Math.
Boulder Valley School District
P.O. Box 186
Boulder, Colorado 80302
Tel: (303) 442-6931

Boulder, Colorado

Reading Development

Language Arts (Reading, Writing, Discussion), Science Social Science, Math. etc. English Teachers, Counselor, Administrators; District Language Arts Supervisor, ES '70 Coordinator	480 Students, Grades 10-12 6 Months
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The program is designed to help students reading below, at or above their proper grade level. An innovative aspect of the 10th grade program attempts to foster the development of those students whose reading level is retarded two or more years according to standardized tests. Implementing the program are one Supervisor, one Department Head and four teachers. A reading laboratory has been established to accomplish the stated objectives. Rather than relying on a basic text, varied reading skill development materials are used. An evaluation is underway but results are not yet available. Suggestions for those wishing to replicate this program are:

- 1) Diagnostic information is essential for proper placement of students in the reading program.
- 2) Close cooperation between the high school and junior high school English departments is essential for proper placement of in-coming sophomores.

Further information obtainable from:

Joanne E. Arnoco (Mrs.)
English Department Chairman
Boulder High School
1604 Arapahoe Avenue
Boulder, Colorado 80302
Tel: 303 442-2430

Boulder, Colorado

Team Teaching - American History

Soc. Studies, Lit., Music, Art
No vocational areas
3 Teachers

145 - 11th Grade
6 Voluntary Summer meetings
and many impromptu sessions.

A team teaching approach has been developed to offer students of American History the advantages of varied specialized backgrounds of three teachers rather than one. The program also involved other faculty members in related disciplines and outsiders as additional resources. Students are given the opportunity to prove certain topics deeply in small seminars. Thus, a better background is provided for the second semester study of 20th Century American History. The seminar groups were found to be most effective according to both students and teachers. Implementing the program are three teachers and two student teachers. Technological aids used are projectors, tape and record players and the public address system. Texts are: U.S. History-Current, De Cande and Dante-Scott Foresman 1967; and Ideas in Conflict-Powell-Scott Foresman 1967.

No formal evaluation has been planned. Recommendations made are to secure small meeting places and to involve the entire social studies faculty in planning and implementation of the program. Large group meetings have proved unwieldy for information purposes.

Further information may be obtained from:

Wendell L. Green
Principal, Boulder High School
1604 Araphoe Avenue
Boulder, Colorado 80302
Tel: 303-442-2430

-OR-

William H. Reed
ES '70 Coordinator
Same Address and Telephone

Duluth, Minnesota

Individualized Instruction - Pilot Program

English, Social Studies, Math., Biology 320 Students, Grades 10-11
Home Economics 6 Months prior to each step
Participating teachers, principal, professional consultants

This program was planned to individualize the instructional program by reformulating courses in terms of performance objectives and allowing students to progress at their own level. It started with 120 sophomores in 1966-1967. This year 100 juniors and 220 sophomores are involved. Subject to constant refinement as it progresses, the program will expand in 1968-69 to include 100 seniors, 220 juniors and 500 sophomores. V.T.R.-film projectors, tape recorders, film strips, projectors and photographs are important resources. Programmed texts and paper backs were also used.

An evaluation of this program's effectiveness is underway, and information is available for distribution. For those interested in replicating this program, it is recommended that each of the participating teachers possess a high degree of enthusiasm for the program itself as well as a high degree of interest in the learning and personal welfare of each of his students. A good, strong teacher is essential to the success of this program. A combination of teacher interest, available technology and clearly defined objectives in behavioral terms should result in the accomplishment of the goals of this program - preparing all students for the world in which they live.

Further information may be obtained from:

E. J. Duffy, Principal
Central High School
Duluth, Minnesota 55802
Tel: 722-5511

Fort Lauderdale, Florida

Academic Games

All academic disciplines

3,000 Grades 7-12

No vocational areas

4 Years

Project director-assistant

Motivation of learning through the development of game situations is the purpose of this program. Many individual games have been created and distributed throughout the country. An "Academic Olympics" is held each year at Nova. Dissemination and consulting are highly developed. Currently involved in implementing the program are 5 supervisors, 7 department heads and 3 para-professionals. Models and games are used in lieu of texts. While no information is available for distribution, evaluation of the program is underway. For those attempting to replicate the program, consultants are available through Nova University, Fort Lauderdale, Florida

For further information contact:

Robert Allen
Nova Schools
3600 S.W. College Avenue
Fort Lauderdale, Florida
Tel: - 305-587-0600

Fort Lauderdale, Florida

Continuous Curriculum

Math., Science, Soc. Studies, Eng. 4400 Students: Gr. 1-12
Technical Science 5 years
Administrators, supervisors, Subject matter consultants, teachers

This program was planned to eliminate both "gaps" and redundancy in the curriculum by providing a continuous set of experiences in all academic areas for grades 1-12. Scope and sequences for grades 1-12 have been developed. All students are involved in a continuous set of experiences, which are not determined by grade level or the beginning of a new school year, but by those which he has previously encountered. Involved in implementing this program are 5 supervisors, 7 department heads, 125 teachers and 32 para-professionals. Audio-visual media are employed throughout the program; a multi-text approach is used incorporating material written by members of the Nova faculty.

Currently there is no evaluation or information available for distribution. Recommendations for others attempting to replicate this program include the following:

1. Obtain 100% commitment to the program from entire staff.
2. Maintain lines of communication between administrators and teachers, teachers of different subject areas, and teachers in the same subject areas.
3. Institute a continuous in-service education program.

Further information may be obtained from:

Director Nova Schools
Fort Lauderdale
Florida

Fort Lauderdale, Florida

Dissemination

All academic disciplines
All vocational disciplines
Dissemination Director and secretaries

No students involved
3 years

The object of this program is to disseminate Nova materials and techniques to schools, educators and people throughout the country. The Nova schools are organized to handle 5000 visitors per year in the elementary and secondary schools. Materials are being produced for sale; and a price list is available. Other materials are offered for free distribution. Presently involved in implementing the program are 5 supervisors, 7 department heads and 4 para-professionals. A variety of audio-visual materials ranging from film strips to closed circuit TV is the primary source material.

An evaluation of the program is underway, but results are not yet available. It is suggested that those wishing to replicate this program visit schools geared for dissemination. For further information contact:

Mr. Charles Pipes - Dissemination Director
Nova Schools
3600 S.W. College Avenue
Fort Lauderdale, Florida
Tel: 305-587-0600

Fort Lauderdale, Florida

Individualized Education (non-graded school)

All academic disciplines	4,300	Grades 1-12
All vocational areas	7	years
Curriculum specialists, administrators		

In this program students assume responsibility for learning. All students proceed through a series of instructional modules at their own rate. Modules are learning activity packages which contain materials that are learner centered. Except for some purely skill courses, all secondary students move independently through sequences of experiences. In science and technical science this is highly developed, so a student may enter or exit from a sequence on any given day. English, social studies and mathematics are approaching this state. Currently involved in implementing this program are 5 supervisors, 7 department heads, 160 teachers and 32 para-professionals. All types of media that can be used by individual children are involved. While there is an evaluation of the program underway, information is not available for distribution at this time.

Recommendations for others attempting to replicate this program include the following:

- 1) Individualization can be accomplished, but only with dedication.
- 2) The attitude of the community and school staff must be receptive to this type of program.

For further information contact:

Director
Nova Schools
3600 S. W. College Avenue
Fort Lauderdale, Florida
Tel.: 305-587-0600

Fort Lauderdale, Florida

Learning Modules or Learning Activity Packages

Eng., Math., Science, Soc. Studies, Tech. Sci. 3000 Student: Gr. 7-12
Technical Science 1-1/2 Years
Assistant Director, Instruction; Supervisors, Selected Consultants

The major purpose of this program is to develop individualized instruction for all students. Programming for each student includes a series of learning activities, which would lead him through those educational experiences which seem most relevant to his interests and goals at any given time. This young program has made great strides in developing and refining Learning Modules. More recent modules reflect more refined alternative paths and transdisciplinary experiences. Cognitive and psycho-motor objectives are stated clearly in behavioral terms, and the affective domain is under investigation. Currently involved in implementing the program are 5 supervisors, 5 department heads, 90 teachers and 15 para-professionals. The school is limited in the use of computers and other technology; however, the Technical Science Department has well equipped laboratories in most areas. A multi-text approach is used wherever possible, as well as a wide variety of audio-visual media.

While information is not available for distribution, an evaluation of the program is underway. Recommendations for others attempting to replicate this program include the following:

- 1) Practical in-depth consulting is perhaps the most effective means of replicating this innovative practice.
- 2) Given primary training in the preparation of Learning Modules it is a consistent on-going process. The Curriculum Leader must work closely with the staff in the process of refinement.

For further information contact:

Dr. James E. Smith, Jr.
Assistant Director, Curriculum & Instruction
3600 S. W. College Avenue
Fort Lauderdale, Florida 33314
Tel: 587-0600

Fort Lauderdale, Florida

Nova Pre-Employment Program

Art, Music, Foreign Language 3,000 Students, Gr. 7-12
Industrial Arts, Home Economics, Bus. Ed. 2 years
Business & industry, teachers, administrators & sociologists.

The purpose of this program is to provide every Nova graduate with some degree of saleable skill. Consequently, every student in grades 7-12 is enrolled in a "saleable" skill course. Currently involved in implementing this program are 2 Supervisors, 2 department heads, 30 teachers, and 9 para-professionals. Television, audio recorders, and other visual aids are used in the program; no text or resource materials are involved.

While evaluation of the program is underway, there is no information available for distribution. It is recommended that cost factors be studied carefully and that the schedule be flexible.

Further information may be obtained from:

Warren Smith, Supervisor; Al Rapp, Department Head
Nova Schools
3600 S. W. College Avenue
Fort Lauderdale, Florida
Tel: 305 - 587-0600

Fort Lauderdale, Florida

Scheduling

All academic disciplines

All vocational areas

Administrators, schedulers, teachers

4400 Students: Gr 1-12

5 years

An attempt is being made to prove the flexibility necessary to meet the needs of a changing curriculum at school. The following have been tried: an extended day, a staggered day, 20 minute modules, 30 minute modules, and Stanford schedules. A locally generated, two week schedule will be tried in 1968-69. The following personnel are involved in this ongoing experiment: 5 supervisors, 7 department heads, all teachers, and 3 para-professionals. Computer-data process equipment was used, as well as material developed at Stanford.

While information is not available for distribution, evaluation of the program is underway. It is recommended that models be studied and related to local situations. For further information contact:

Dr. James Smith
Nova Schools
3600 S.W. 70th Avenue
Fort Lauderdale, Florida
Tel: 305-587-0600

Fort Lauderdale, Florida

Staffing

All academic disciplines	3,000 - Grades 7-12
All vocational areas	Functioning 6 years-to
A committee of 50	be continued

Team teaching is used in all departments, where feasible. Until specific criteria have been established for differentiation of staff, teams have been formed based upon: (1) subject matter strength, (2) teaching strategy strength, and (3) use of para-professionals. In the six years of Nova's existence, the program has been altered and extended so that team teaching is utilized wherever applicable. Personnel involved in implimenting the program are five supervisors, 5 department heads, 120 teachers, 25 para-professionals and teacher interns (where possible). The unique feature of the Nova Administration structure is the fact that an Assistant Director in charge of Curriculum and Instruction is employed, who spends all of his time in that field. Various texts, found in the local and county professional library, are used. Resource people participate in in-service programs. A video-tape machine is used by the five supervisors in order to improve instruction through clinical supervision.

While no information is available as yet, an evaluation of the program is underway. Recommendations for others attempting to replicate this program include the following:

- 1) Innumerable books have been written on the topic.
- 2) Many colleges and universities provide knowledgeable consultants.
- 3) Ultimately practitioners prove the most effective type of consultants.

Further information may be obtained from:-

Dr. James E. Smith, Jr.
Nova Schools
3600 S. W. College Avenue
Fort Lauderdale, Fla. 33314
Phone:- 587-0600

Fort Lauderdale, Florida

Technology

1. Closed Circuit TV
 2. Computer
-

Math., Sci., S.S., Engl., Foreign Lang. 3,000 Grades 7-12
Typing, Electronics, Mech. Tech., 2 Years
Driver Education, drafting teachers, administrators, principals,
technicians.

A complete closed Circuit TV and audio system and computers are functionally integrated into the educational program. The TV system offers a method of including planned lectures in packages, which obviates the necessity of teachers having to repeat lecture-demonstrations each time students arrive at a particular point in the learning sequence. The present average is 15 minutes per package. The computer grades test cards, yields print-outs which include curves and item analyses, schedules students, keeps records and prints report cards. To date these systems are operating as planned. The T.V. and audio systems are continually being expanded, while computer scheduling and programming studies are in process in order to simplify scheduling techniques. Presently involved in implementing the program are 5 supervisors, 7 department heads and all teachers. Texts and software vary according to needs.

Evaluation of the program is underway, and information is available for distribution. It is recommended that systems be analyzed very carefully in terms of need before purchasing T.V. or other audio equipment. It is necessary to conduct in-service courses, if teachers are to be able to use the equipment effectively.

Further information may be obtained from:-

Mr. Jerry Trago
3600 S.W. College Avenue
Fort Lauderdale, Florida
Phone - 305-587-0600

Fort Lauderdale, Florida

Variable Density Foreign Language Placement

French, Spanish, Latin, German, Russian	2,000 students Gr. 7-12
No vocational involvement	1 year

Supervisor, Department Head, Teachers

This program attempts to make optimum use of student and teacher time by scheduling students for varying numbers of classes per week according to past performance, course level, and performance criteria demanded by the subject. To date, 2,000 students have been placed according to specific criteria developed by the staff. Emphasis is placed on foreign language competence as a salable skill. Implementing the program at present are 1 supervisor, 1 department head, 14 teachers and 2 para-professionals. Technological resources include tape recorders, a language laboratory, audio notebook, film strips and films. Various ALM (Harcourt Brace) and conventional texts are used; in fact, a deliberate multi-test approach was planned.

For those attempting to replicate, the following suggestions are offered:

- 1) Plan carefully.
- 2) Hire consultants with experience.
- 3) Plan a flexible (modular) schedule.
- 4) Develop criteria carefully.
- 5) Plan an extensive in-service program for teachers.

Further information may be secured from:

Mooreman Collette,
Department Head
Thomas Ryan,
Supervisor
Nova Schools
3600 S.W.
College Avenue
Ft. Lauderdale, Florida 33314

Houston, Texas

Computer-Assisted Mathematics Project

Mathematics

Grades 7-9

None

Planning time not indicated

Supervisors, Teachers,
Computer Specialist

The purpose of this program is to study the feasibility of using a time-sharing computer terminal for solving problems in junior high school mathematics. The project began in the Spring semester of 1968; therefore it is too early to evaluate its progress. Two supervisors and 8 teachers are involved in implementation at this date. A computer-terminal is in use; texts and other materials are in the process of development.

An evaluation of the program's effectiveness is underway, but no information is available for distribution.

Further information may be obtained from:

Mrs. Hammerlin
1300 Capitol Ave.
Houston, Texas
Tel: CA4-9871

Houston, Texas

Computer - Oriented Mathematics Study

Mathematics, Science

Grades 10-12

One Year

Supervisor, teachers and computer specialist participated in planning

This program is aimed at determining whether the use of time-sharing terminals is feasible in the teaching of computer-oriented mathematics, and its application to science, at the senior high school level. Two supervisors, 4 department heads, and 6 teachers are currently involved in implementing the program. The IBM 26 - Key punch, IBM 1440 and terminals are in use. Resource material developed by IBM is being utilized, in addition to instructional material specially prepared for this program. The current demand for the course, which is an elective, indicates expansion of the program to include other schools is probable.

Information on the effectiveness of the program is not yet available as evaluation is still in progress.

Further information may be obtained from:

Mrs. Thelma Hemeling
Houston Public Schools
1300 Capitol Street
Houston, Texas 77002
Tel: 713-CA-4-9871

Houston, Texas

Divisuma Calculator Project

Mathematics and Science

Grades 9 and 10

None

Mathematics specialists and teachers

The purposes of the Divisuma Calculator Project were to motivate students in mathematics and physics and to provide remedial measures if needed. Student achievement and interest level indicate that the project has been successful. One supervisor, one department head, two teachers and one teacher intern were involved in the program. In addition to approved textbooks, the Divisuma Calculator Manual, specially developed materials, and the Olivetti Underwood Divisuma Calculator were utilized.

Evaluation of the program is underway. However, information is not available for distribution at this time.

Further information may be obtained from:

Mrs. Hammerlin
Houston Public Schools
1300 Capitol Street
Houston, Texas 77002
Tel: 713-Ca 4-9871

Houston, Texas

Engineering Concepts Curriculum Project

Science

50 Students grades 10-12

None

Two Years

Physics and mathematics teachers

This program was planned to evaluate the effectiveness of course materials prepared through the Engineering Concepts Curriculum Project. Materials used in the project have been revised and are to be assessed on the basis of feedback. Two supervisors, one department head and two teachers implement the program using physical science aids, the assigned text and resources furnished by the Engineering Concepts Curriculum Project.

Evaluation of the program is underway. However, this information is not ready for distribution.

Further information may be obtained from:

Mrs. Sarah Hampton
Houston Public Schools
1300 Capitol Street
Houston, Texas 77002
Tel: 713-CA-4-9871

Houston, Texas

Inductive Teaching in English Classes

English	110 Students: Grades 8, 10
No vocational areas	2 years
1 English Specialist and 5 Teachers	

In order to meet the needs of the uninterested and apathetic student, an inductive teaching strategy has been introduced with this program. It is designed to be prescribed when deemed appropriate in tailoring instruction to individual needs. Since its inception, improved student interest has been evidenced by an increased use of the materials center. The program is being implemented by 1 supervisor, 1 department head, and 4 teachers who use paintings, rocks, music, poems, newspapers, paperbacks, and maps as instructional material. Regular texts and technological aides have not been employed.

An evaluation of this program is underway; information is available for distribution and may be obtained from:

Mrs. Robert S. Deason
119 E. 39th Street
Houston, Texas
Tel: OX 2-1530

Houston, Texas

Pilot Project in Computer - Assisted Instruction

Mathematics	30 Students Gr. 10-12
No Vocational Areas	One year

Teachers and Mathematics Supervisors

It is the aim of this program to evaluate programs of Computer-Assisted Instruction, and to develop computer-oriented curriculum material. Orientation and In-Service training are in progress. The program is being implemented by: 2 Supervisors, 1 Department Head and 40 teachers. Technological aids employed are IBM 1440 computer and terminals; the existing text and specially developed materials are currently in use.

An evaluation of the program's effectiveness is underway, but no information is available for distribution as yet. Further information may be obtained from:

Mrs. Dorothy Leach
Westbury High School
Houston, Texas

Tel: CA 4-9871

Houston, Texas

Pilot Program-Occupational Cooperative Training

All basic skills academic program	650 Students: Grades 10-12
Appropriately correlated vocational area	1 Year
Supervisors, Texas Ed. Agency, teachers	

The purpose of this program is to determine the feasibility of an occupational cooperative training program in the Basic Skills Programs and to offer the student optional opportunities for on-the-job training. Because employment is correlated with the academic program, heightened student interest has resulted in increased enrollment. The personnel involved in implementing this program are two supervisors and two department heads. Regular texts as well as supplementary materials supplied by the employers were utilized for instruction.

At present this program is being evaluated but information is not available for distribution.

Mrs. Ruth Denny
Houston Public Schools
1300 Capitol Street
Houston, Texas 77002
Tel: 713-CA-4-9871

Jackson, Kentucky

Project Opportunity

All academic disciplines	225 at present (should increase
No vocational areas involved	to 400) 7-12
	One year

Southern Assoc. of Colleges and Schools and College faculty from seventeen sponsoring colleges.

This is a special program designed to prepare culturally isolated yet talented youth for admission to higher education. Key facets include guidance, cultural and educational enrichment. In approximately eleven schools and, through a variety of devices, potentially talented students are identified in the seventh or eighth grade. They will be followed for six years and supported in their efforts to qualify for college through stipends, materials, special educational programs, counseling and guidance, and other devices. Those completing the program are assured of financial support in college, and will be encouraged to do their work in the South and to remain in the South. An intensive objective of the program is to raise the level of aspiration of an entire school community and its constituents by demonstrating through the encouragement of individuals, increased breadth of opportunity. One Project Director and a coordinating committee of educators are responsible for overall administration; a central staff is being assembled.

Texts, resource materials, and technological aids are those already available. However, additional materials are used at the regular summer programs held on various college campuses.

The College Entrance Examination Board is responsible for research and evaluation, results of which will be available later. No suggestions have been made as yet for those districts wishing to initiate a similar program. For further details please contact:

William B. Burke
Project Opportunity
Breathitt County Schools
P.O. Box 626
Jackson, Kentucky 41339

Mamaroneck, New York

Banking

Mathematics, English,
Business, Accounting
Teacher, Bank personnel, members of banking associations.

32 students: Gr. 11 & 12
Three Years

This program will provide practical training in accounting and secretarial work, as well as training leading toward initial and gainful employment in a community bank. One teacher and one supervisor are involved in the program which will be implemented through the use of typewriters, adding machines, and posting machines. Banking periodicals and magazines will be introduced, and personnel associated with various community banks consulted.

The program will become operational in the fall of 1968.
Further details may be obtained from:

Marie LoMonaco
Mamaroneck High School
Mamaroneck, New York 10543
Tel. 914-OW-8-9000

Mamaroneck, New York

Biological Science and Health

Health Education, Biology
No vocational areas
1 Health teacher, 1 Biology teacher
Individual planning

120 Students: Grades 10-'2
Four weeks-Spring, 1966;
1 hour/week team teaching
4-6 hour weeks

This is a non-Regents biology course designed to inspire student awareness of the interrelationships between man and his body (anatomy and physiology), man and his environment (ecology), and man and his mind (psychology and mental health), stressing man's role in the care of both his internal and external environment. It is a laboratory oriented program, encouraging learning by discovery. Initially the program used a team teaching approach. This method has been temporarily discontinued, and the program is currently being implemented by two teachers with emphasis on man's role in the care of his internal and external environment. The texts used in the course are Your Biology, Smith & Lisonbee and Modern Health, Otto & Towle. Within the curriculum extensive use is made of all available human and physical resources, including speakers from associations and institutions concerned with health and field trips to museums and conservation areas. A variety of audio-visual and laboratory equipment is being employed.

Evaluation of the program is not yet underway. Immediate recommendations for others attempting to replicate this program are:

- 1) Team meeting times must be built into the schedule.
- 2) The community should be investigated for all available areas of study and for speakers.
- 3) The laboratory is an essential aid in the encouragement of learning by discovery.

Further information may be obtained from:

Michael Yahia, Chairman
Science Department
Mamaroneck High School
Mamaroneck, New York
Tel: 914 - OW8-9000

Mamaroneck, New York

Chemical Science

Chemistry
Pre-Nursing, Lab Technicians
Chemistry Instructors

*Grades 11-12
Many Years

This is a non-Regents, two semester course offered to juniors and seniors who need science enrichment in chemistry as preparation for advanced or more inclusive chemistry courses. A careful selection of topics and laboratory experiences is currently underway. Since this is an experimental course, the emphasis will be placed on chemistry; but topics of practical nature from biology and physics will be included. There is one department head implementing the program, employing technological aids including films, laboratory equipment and a tape recorder; Chemistry And You, Baker & Bradbury, and The Encyclopedia Brittanica are being used as texts.

Evaluation of this program has not been undertaken.

Further information may be obtained from:

Michael Yahia, Chairman
Science Department
Mamaroneck High School
Mamaroneck, New York
Tel: 914 - OW 8-9000

Mamaroneck, New York

Consumer Mathematics

Mathematics
Utilization of Business Machines
Teacher planned

80 Students - Grades 9-12
One Month

The purpose of this program is to offer remedial students the opportunity to acquire the basic skills in mathematics needed in our society. Emphasis has been placed on the improvement of basic arithmetic skills and their application in practical problem solving. Success has been noted in this area. Currently involved in implementing the program are: 1 department head, 3 teachers, and 1 para-professional. The text in use is Essential Math, Langford; literature in math, tables, charts and other related resource material have also been utilized extensively. Technological aids being employed include the electric calculator and television taping devices.

Evaluation of the program is underway but information is not yet available for distribution. Recommendations for others attempting to replicate this program include the following:

- 1) Algebraic concepts and formal steps should be completely avoided.
- 2) A purely intuitive approach is necessary.
- 3) The use of all possible aids, tables and charts, for all calculations is highly desirable.
- 4) Repeated review of material should be provided, and opportunities for success must be offered to the individual student constantly.

Further information may be obtained from:

Arnold Manchester, Chairman
Mathematics Department
Mamaroneck High School
Mamaroneck, New York
Tel: 914-Ow8-9000

Mamaroneck, New York

Continuous Progress in Latin

Proposed 1968-69

Latin
Law, Medicine, Clergy
One teacher

100 Students: Grades 9-12
One Month

This program has been planned to allow the student to progress at his own rate through the prescribed course of study by utilizing a non-graded method. Clearly defined study units encompassing text material, curriculum goals, and resource references, geared to the interest and capacity of the individual student, are to be used as the basis for the instructional program. The planned curriculum includes the preparation of students for Regents, College Boards, and Advanced Placement Examinations. It is the intent to offer the student the opportunity to achieve the development of his maximum capabilities in his mastery of the subject. One teacher is currently involved in implementing the program. Slides, films, tapes and other audio-visual aids are to be used extensively; texts and other possible resource material available for the program will be explored in a projected summer program.

Evaluation of the program is not underway, but it is suggested that future evaluation of a program of this kind would emphasize the total developmental progress of the students in combination with test scores.

Further information may be obtained from:

Leone Roselle
Mamaroneck High School
Mamaroneck, New York
Tel. 914-OW8-9000

Mamaroneck, New York

Developmental Reading

English

75 Students Grades 11 & 12

Broad vocation application

One semester

Department head, teachers and a reading specialist

The purposes of this program are to develop basic reading skills for a more effective performance by the student in the total academic program, and to inspire psychological and intellectual involvement in the discussion of the readings and their relevancies to life experience. Intensive reading assignments from a wide variety of fiction and non-fiction paperbacks, selected according to the types of interests and the level of emotional and academic maturity of the students, are included in the curriculum and combined with word study, vocabulary building, and the writing of compositions based on topics selected from the readings. The program shows very effective results. Students are reading more intensively and extensively than they would in a regular English class. Since a directive approach is given to each reading assignment, the student develops a greater awareness of words and their implications and gains a specific and general understanding of the reading assigned. The program is currently being implemented by 1 department head and 4 teachers. Resource materials and technological aids employed in the program include films recordings, projectors and a Xerox machine.

Evaluation of the program is underway, and information is available for distribution. It is recommended to others attempting to replicate this program that the most challenging aspect is the effective grouping of students according to their ability and achievement. The program needs to be designed for students with average ability, who, because of socio-economic factors, have not fully developed their potential. Small groups under the close supervision of an English teacher and a reading specialist can achieve a greater degree of academic success and a feeling of greater personal achievement.

Further information may be obtained from:

Mr. Robert Geller, Chairman
English Department
Mamaroneck High School
Mamaroneck, New York
Tel: 914-OW-8-9000

Mamaroneck, New York

English (Vocational Orientation)

English
Business Education
Department Chairmen, teachers

20 Students - Grade 12
Twenty hours

This program was designed to improve the ability of students to speak, read, and write through a study of business subjects. Concurrently, the development of a keener sense of values was stressed. Those involved in the program were expected to master the subject areas covered. By improving the ability to read and understand material distributed by the Internal Revenue Service, income tax returns were completed correctly. Concern for social problems was encouraged through an analysis of an Auden poem; creativity was enhanced through the composition of a musical accompaniment for the poem. Two department heads and two teachers are currently implementing this program. Films, tape recorder, and a tele-lecturer are in use. In addition to income tax materials, and poetry, Sports Illustrated magazine was read. A visit to a factory was employed for a study trip.

Evaluation of the program has not been undertaken. Recommendations for others attempting to replicate this program include the following:

- 1) Students should be involved in the planning.
- 2) Specific course content should be used as a springboard.
- 3) Teachers must remain alert to meaningful deviations throughout the course.
- 4) Time limitations should be regarded as flexible.

Further information may be obtained from:

Robert Geller, Chairman
English Department
Mamaroneck High School
Mamaroneck, New York
Tel: 914 - OW 8-9000

Mamaroneck, New York

Graphic Arts

English, Math, History, Science
Business Practices & Business Machines

Grades 9-12

Management, Production Work, Craftsmen
(Strippers, Cameramen, Pressmen etc.)
and related areas (Varityper,
Salesmen & Service)

80 to 100 Hours
to Date

Graphic Arts Personnel

The purpose of this program is to familiarize the student with the many operations and processes involved in the production of graphic communications and the relationship of these operations and processes to the various academic disciplines. The physical facilities have been designed and orders are being prepared for the necessary equipment and supplies needed. The curriculum is still in the process of refinement and modification. There is currently one Teacher involved in the program using 8 and 16 MM films, 35 MM slides, overhead projectors and field trips. The texts in use includes: Printing Area, Industrial Arts, Printing for The Industrial Arts, and General Printing Syllabus obtained from The University of New York, State Education Department in Albany; other text material includes Exploring the Graphic Arts, Marinaccio, Jan Nostrand, Princeton, New Jersey; Photo-Offset Fundamentals, John E. Cogoli, McKnight & McKnight, Ill; Practice of Printing, R & E Polk, Bennett, Illinois; Printing Trades, Canadian Occupations Monograph 9; and The Graphics of Communications, Turnbull & Baird, Holt, Rinehart & Winston.

To date, there has been no evaluation of the programs effectiveness. The following recommendations are considered essential for others wishing to replicate the program:

- 1) There should be Inter-Department cooperation,
- 2) A large initial investment for equipment and knowledge of current technological developments are required.

Further information may be obtained from:

Henry Baldera, Chairman
Practical Arts Department
Mamaroneck High School
Mamaroneck, New York

Mamaroneck, New York

Group Counseling

All Subject areas are discussed
Occupations discussed
Counselors & Psychologists

6-8 Students per group
(10 groups now working)
Grades 9-12

Groups of students meet under the leadership of a counselor or Psychologist to discuss mutual problems, hopefully to solve some and show direction for others. This program is now in progress and group leaders are meeting and discussing techniques and procedures. There are, currently, 10 counselors and 2 psychologists involved in implementing the program with Dr. Brown, a resource consultant from the New Rochelle Guidance Clinic, assisting in an advisory capacity. The tape recorder is utilized extensively within the program.

There is no evaluation of effectiveness or information available for distribution. For others attempting to replicate this program, it is recommended that, initially, a heavily structured approach be used, with positive techniques discussed and questions answered. As group leaders assume their roles, a lessening of structure is desirable, with stress then on group progress and leader's growth.

Further information may be obtained from:

Dr. Margery Bernstein
Mamaroneck Public School System
Mamaroneck, New York
Tel: 914 OW 8-9000

Mamaroneck, New York

Home Maintenance

Mathematics & Science	20 Students - Grades 11-12
Most Vocational Service Occupations	40 - 60 hours
EX: Electricians, Plumbers, Carpenters, Etc.	
Industrial Arts Personnel	

This program was planned to familiarize the student with basic home maintenance procedures. This is the second term this course is being offered. Study includes plumbing, electrical work, woodworking, metalwork and other related operations. This course is designed as a ten week curriculum for students who otherwise would not participate in an Industrial Arts course. There is one teacher participating employing technological aides including films, 16 M.M., and Samples. Field trips and lectures are also included within the curriculum. The texts used are: Metal Work, Ludwig; and Woodworking Technology, Hammond, Donnelly, Harrod and Rayner.

To date, no evaluation of the program has been made. The course of study has run into trouble this second term, mainly because counsellors have now used this course as a dumping ground for students who have dropped other courses due to failures. It is recommended that others attempting to replicate involve students representing a cross section of the school population.

Further information may be obtained from:

Henry Baldera, Chairman
Practical Arts Department
Mamaroneck High School
Mamaroneck, New York
Tel: 914 - OW 8-9000

Mamaroneck, New York

Home Management

Social Studies, Eng.	120 Students: Gr. 10-12
Home Economics, Industrial Arts	One month
Merchants and owners of service businesses provided assistance in planning	

This program was planned to help students understand the value of money and its relationship to time and energy in production. It is also intended to introduce the student to proper shopping methods and personal money management. Comparative studies of fresh vs. processed foods have been included in the curriculum in order to explore cost, efficiency of use and esthetic appeal of the end product. The program has been so well received by the students that enrollment for the second offering doubled. Two teachers are implementing the program using the following texts:

Consumer and His Dollars - Schoenfeld & Natella
Young Homemakers Equipment Guide - Louise J. Peet
How to Manage Your Money - Marine Midland Banks
Consumer Education - Nass
Spending Your Clothing Dollar

Technological aids utilized in the program include 16 mm films, film strips and an overhead projector.

Evaluation of the effectiveness of the program has not yet been made. It is recommended that others attempting to replicate this program include as many activities as possible within the curriculum. Possible areas include retail buying, home ownership, insurance, and field trips to markets. Further information may be obtained from:

Henry Baldera, Chairman
Practical Arts Department
Mamaroneck High School
Mamaroneck, New York

Mamaroneck, New York

Large Group Instruction in Spanish

Proposed 1968-69

Spanish	400 Student - Grades 9-12
Spanish Industries-Diplomatic Service	One Month
Three teachers participated in planning	

It is the goal of this program to explore the possibilities offered by large group instruction in Spanish and to organize a syllabus for this type of instruction in Spanish and Latin American culture. Specific cultural study units are to be developed in a summer workshop, covering daily life, music, dance, architecture, literature, and art. Proposed student projects include panel discussions in Spanish and creative writing. It is also planned that a system of rotation will be refined which will free four teachers for remedial work with small groups of students who need intensive skill practice, while two teachers remain with the large group. One department head, two teachers and a typist are currently involved in implementing this program. Texts and all other resource material available will also be explored this summer. Audio-visual media, including tele-communication, will be utilized within the curriculum, in addition to direct contact with guest speakers whose professional or personal experience relates to the course of study.

Tests and other measurements of progress are being developed for the evaluation of the effectiveness of the program. The plan is recommended for the study of all languages.

Further information may be obtained from:

Edith Sirica
Mamaroneck High School
Mamaroneck, New York
Tel: 914 -OW8-9000

Mamaroneck, New York

Mamaroneck High School English Ten Approach to the Humanities (MENTA)

English
Art
English Teachers

Grade 10
One Month

MENTA was designed to encourage students to

- 1) perceive and understand some of the implications of the reciprocal effects between men and their environments
- 2) practice meaningful expression in a variety of ways (writing, art, movies, etc.), and
- 3) be more active and generative by undertaking different projects and feeding their findings back to each other.

Administered to slow, average, and bright students, the program sought common focus by working with reading and experiences common to all levels. Definite animosities among the social classes represented in the program were revealed and overcome slightly. Teachers' beliefs that children can and ought to attempt creative projects were affirmed. It was felt that this kind of approach is more relevant and, in many ways, superior to traditional English courses. One supervisor, one department head, four teachers and two student teachers implemented the program. Audio-visual media were used extensively, including both still and motion cameras. Among the movies shown were: Weapons of Gordon Parks, Nothing But a Man, Dr. Strangelove, The Third Man, Citizen Kane, Billy Budd, Treasure of Sierra Madre. Readings included Huck Finn, In Our Time, Death of a Salesman, Use and Misuse of Language and Lord of the Flies.

Evaluation of the program is underway, with information available for distribution. Recommendations for others interested in a similar program include the following:

- 1) This course should not be attempted within a traditional time schedule. Agreement on schedule requirements should be secured before proceeding with program development.
- 2) Free time should be provided for teachers to confer among themselves and with students working on projects.
- 3) A specialist should be assigned to slow learning groups.
- 4) Requests should be made for a teacher aide and ample room to meet, show films, etc.; a large enough budget should be available to finance movie rentals, cost of machinery, film processing etc.

Further information may be obtained from:

Robert Geller, Chairman
English Department
Mamaroneck High School
Mamaroneck, New York
Tel. 914 - OW-8-9000

Mamaroneck, New York

Mathematics XII

Mathematics, traditional & modern
Broad Vocational Application
5 Math. teachers

120 Students, Grades 11 & 12
One Semester-after school

This program was designed to prepare the college-bound-student for continued study in the field of mathematics involving calculus and finite mathematics. All of the five classes are well into the first year's curriculum and are functioning quite successfully. Currently involved in the implementation of this program are 1 department head and 4 teachers. The texts are as follows:

College Algebra, Rosenbach, Whitman et al.
Calculus & Analytic Geometry, Shoch & Warshaw
Probability with Statistical Applications

No technological aides are being employed.

All evaluations at this time have been informal and the results are not as yet available. Of prime importance to those attempting to replicate this program are teachers who are well informed and who have a modern background and training.

Further information may be obtained from:

A. R. Manchester, Chairman
Mathematics Department
Mamaroneck High School
Mamaroneck, New York
Tel: 914 - OW 8-9000

Mamaroneck, New York

12 - Modern English

English
Office Practice - Secretarial Practice
Teacher planned

25 Students Grade 12
Four weeks

The objective of this program is to offer Office Practice-Secretarial Practice students a meaningful program in English related to their work skills. To broaden the base of their experience, art and music are integrated with some of the literature. In progress for three years, the program is being implemented by 2 department heads and 2 teachers. It has been the practice to vary the choice and emphasis of material to suit the particular demands of each class. Texts in use include: Business English and Communication; Words, Words, Words, and Essays for Modern Youth. Other reading material includes ten contemporary novels and plays. Contacts with teachers of music and art and with various representatives of the business world have been utilized within the curriculum, in addition to exposure to library films, tapes and records. Technological aids provided for the program are typewriters, a tape recorder, a film projector, and a record player.

Periodic informal evaluations by the teachers and end-of-year student evaluations of the effectiveness of the program have been made. These have been generally positive and gratifying. As yet, there is no evaluative information available for distribution. It is recommended that others attempting to replicate this program follow the basic philosophy but structure the program in accordance with the abilities of the teachers and the needs of the students to be involved.

Further information may be obtained from:

Robert Geller, Chairman
English Department
Mamaroneck High School
Mamaroneck, New York
Tel: 914 - OW 8-9000

Mamaroneck, New York

Serigraphy

Art, History, Science
Management, Production, Sales

20 Students per session
Grades 10-12

Graphic Arts personnel participated in planning. 40 Hours

This program was planned to familiarize the student with various techniques used in stencil reproduction and to explore the practical application and relationship of the process to daily living. The curriculum to date has included tusche-glue, paper, lacquer film, and photographic stencil reproduction and the production of silk screen equipment. One teacher is responsible for the implementation of the program and is in the process of refining and improving the course of study as it progresses. Silk Screen Printing, Biegeleisen & Cohn; The Complete Book of Silk Screen Printing Production, Biegeleisen; and Exploring the Graphic Arts, Marinaccio, are the texts which have been used; other resource materials include samples and films.

No evaluation of the program is yet underway. Immediate recommendations for others attempting to replicate this program are:

- 1) Basic woodworking tools and a suitable work area, including large work tables, print drying area and space for supply storage, are essential.
- 2) Students involved in the program should represent a cross section of the entire school population.

Further information may be obtained from:

Henry Baldera, Chairman
Practical Arts Department
Mamaroneck High School
Mamaroneck, New York
Tel: 914 - OW8-9000

Mamaroneck, New York

Teacher Intern Program

9th Grade Social Studies, 10th Grade World Hist. 300 Students: Gr. 9&10
None 2 Years

2 Master Teachers, one, an authority
on ninth grade Social Studies, the other,
an authority on tenth grade social studies,
2 graduate students as intern teachers,
2 student teachers

The purpose of this program is to give better professional teacher training and to provide teachers with more planning time. The teachers, teacher interns, and student teachers work with six classes and are able to provide these classes with large and small group, as well as individual, instruction. The students have the advantage of the immediate availability of six adults; more time for the development of a coordinated curriculum is available to the ninth and tenth grade teachers. The interns have gained professional experience and responsibility under the supervision of the master teachers. The personnel implementing this program are 3 supervisors, 1 department head, 2 teachers, and 2 teacher interns. There was no specific text used; however a great many technological aids were employed including films and slide films, both with and without sound. The students were required to learn to operate all of the equipment, to facilitate individual and independent study.

This program has been evaluated and information is available. For those seeking to replicate, the following is advised:

- 1) Be willing to experiment freely.
- 2) Master teachers are to be fully responsible for the program.
- 3) Interns are not to be used as "cheap labor."
- 4) Students should be fully involved.
- 5) Obtain frequent reports on curriculum experiences.

Further information may be obtained from:

Thomas F. Rock, Chairman
Social Studies Department
Mamaroneck High School
Mamaroneck, New York 10543
Tel.: 914 OW 8-9000

Mamaroneck, New York

Voc. Ind. Coop. Training Opportunity (VICTO)

Labor Laws, Labor Relations	60 Students-Grades 11 & 12
Building, Trades, Auto Mechanics, Hardware	Three Months
and Marine Supplies, Electronics	
Teacher-Coordinator from N.Y. State Education Department	

This program was planned to provide an opportunity for students to take regular academic subjects in the morning and to work afternoons in approved training or job situations. Part-time employment assisted students in selecting careers and learning trades. One period a day was devoted to class instruction related, both generally and specifically, to work experiences. First introduced in 1952 with eight students, VICTO has grown each year and has included general work experience and office occupations for girls. A teacher-coordinator for instruction and supervision is currently implementing this program. Various texts from the New York State Labor Department on Labor Relations, as well as a handbook of related materials prepared by the State Department and coordinators around the state are in use. In addition, students are shown films about occupations, and field trips to business establishments are employed.

Evaluation of the program has not been undertaken. It is suggested that others attempting to replicate this program check the State Education Department concerning other plans currently in operation.

Further information may be obtained from:

Harvey E. Ury, Coordinator VICTO
Mamaroneck High School
Mamaroneck, New York 10543
Tel: 914 - OW 8-9000

Mineola, N.Y.

Artistic Experiences Program

Art, Music, English, Phys. Ed.	4700 students K-12
Graphic Arts, Mech. Drawing, etc.	6 months
Representatives from all departments	

This comprehensive program focuses on the developement of positive attitudes toward the place of the arts and the artist in our modern society through increased opportunities for direct participation in a variety of artistic endeavors. A variety of programs have reached approximately 8,500 students (K-12) with increased participation by community residents and faculty at concerts, theater parties, and in school arts programs. Directly involved in implementing this program were 3 supervisors, 1 department head, 25 teachers and 12 paraprofessionals. In addition to the activities mentioned, students engaged in critical discussions, made evaluations and reports. T.V. communications and IBM evaluation cards were the basic technological aids. Additional resources included the N.Y. State Council on the Arts, Lincoln Center Student Programs, and individual research by the Arts staff.

Evaluation of the project is in process, and at some future point will be available. Suggestions for replication are:

- 1) Establish program goals, student goals.
- 2) Provide for faculty and community involvement.
- 3) Enlist support of central administration.

Additional information may be obtained from:

Dr. Joseph D. LaRosa
Coordinator of Fine and Performing Arts
Mineola High School
Mineola, New York

Mineola, New York

English As A Second Language

English

6 Students, 9-11 Gr
One Year

(Vocational involvement dependent
upon relevance to individual student)

Teachers trained in teaching English as a second language

This program has been planned to:

- 1) Give non-English speaking students a basic proficiency in English.
- 2) Acculturate students into society.
- 3) Have students retain pride in their native culture.
- 4) Provide basic aid in understanding content subjects.

One department chairman and two teachers are involved in implementing this program. To date the students have become socially confident, as well as basically communicative in English; moreover, they are able to handle content subjects. Audio-visual aids are employed as well as a supply of special grammars, readers, vocabulary word building books in the field.

An evaluation of the program's effectiveness is underway, but no information is available for distribution at this time. Those attempting to replicate this program should hold the conviction that the essential need for success of such a program is total immersion of the students in the audio-lingual program, so that they accomplish the goal of learning and understanding English as a second language.

Further information may be secured from:

Dr. Joan Berbrich
Mineola High School
Mineola, New York 11501

Mineola, New York

Freshman Teacher - Counselors

All academic disciplines	425 - Ninth graders
All vocational areas	One year

Administrators, Guidance Director and teacher-counselors participated in planning.

This program utilizes part-time teachers to counsel freshman students. As a result of this program, case loads for the full-time counselors (grades 10-12) have been substantially reduced, thereby making it possible for them to see more students for a longer period of time. The progress to date has been excellent. Ninth grade students get their fair share of counseling, their needs are met on an individual basis, and, in effect, the part-time counselors have become specialists in freshman personal and academic problems. Moreover, there is a much better ratio between full-time counselors and upper classmen. Three supervisors, one department chairman and four teachers have been involved in implementing this program. No technological aids, texts or resource materials have been specifically utilized since experienced personnel were involved who stimulated interest, involvement and cooperation in all departments of the school.

An evaluation of the program's effectiveness is currently underway, but no information is available for distribution at this time. Anyone attempting to replicate such a program, however, would do well to house all counselors in one office in order to eliminate supervisory and administrative problems which may otherwise develop. Further information may be secured from:

Vito Merola
Mineola High School
Armstrong Road
Garden City Park, New York 11040

Tel: (516) 747-6700 Ext. 735

Mineola, New York

Freshman Teacher - Counselors

All academic disciplines
All vocational areas

425 - Ninth graders
One year

Administrators, Guidance Director and teacher-counselors participated in planning.

This program utilizes part-time teachers to counsel freshman students. As a result of this program, case loads for the full-time counselors (grades 10-12) have been substantially reduced, thereby making it possible for them to see more students for a longer period of time. The progress to date has been excellent. Ninth grade students get their fair share of counseling; their needs are met on an individual basis, and, in effect, the part-time counselors have become specialists in freshman personal and academic problems. Moreover, there is a much better ratio between full-time counselors and upper classmen. Three supervisors, one department chairman and four teachers have been involved in implementing this program. No technological aids, texts or resource materials have been specifically utilized since experienced personnel were involved who stimulated interest, involvement and cooperation in all departments of the school.

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Vito Merola
Mineola High School
Armstrong Road
Garden City Park, New York 11040

Tel: (516) 747-6700 Ext. 735

Mineola, New York

Home Economics Occupational Food Services

All academic disciplines 10 students-normal-12th gr.
Distributive Education, Home Economics, Two years
Printing

Administrators, teachers, Chairman of Guidance Department.

This program was designed to help individuals develop attitudes, understanding and marketable skills for competent work performance in service-type and semi-skilled jobs related to the field of Home Economics. This program has progressed to the extent that trainees are accepted as permanent or part-time employees of local hotels and restaurants.

Three supervisors, one department chairman, four teachers and one para-professional are actively involved in implementing this program. Extensive technological aids including flip charts, flannel boards, opaque projectors, records, tapes, movies, film strips, slides, TV, magazines and others have been used. Programmed instruction is also involved. Ample resource books, pamphlets, bulletins and cartoons are available including such diverse titles as: Applied Economics, and The Essentials of Good Table Service.

Evaluation of the program is underway, and information is available for distribution. Recommendations for others attempting to replicate this program are:

- 1) Teacher must be experienced in quantity food service or administration.
- 2) Give program time to grow. Do not expect too much during the first three years.
- 3) Work closely with the guidance department for a complete understanding of program and pre-requisites for students entering the program.

Further information may be obtained from:

Dr. Henry Rosenbluth
Mineola High School
Armstrong Road
Garden City Park, New York

Tel: PI 2-6700 Ext. 727

Mineola, New York

Individual Research Seminar: Social Studies

Social Studies, English

No Vocational areas

Department head and principal, with advisory assistance from other Social Studies teachers.

8-20 Senior students

Several months

The purpose of this program is to foster the students' ability to do individual research. Each member of a small class of interested and capable students has, as his project for the semester, the writing of an original research paper. Each paper is divided into three to five chapters, and work in progress is given a critical evaluation by the instructor and the entire group of students, all of whom have read the work in advance. Each student, therefore, not only works on his own, but does so with the intimate guidance of both teacher and peers. According to their own reports, received after they have graduated, students have found the program to be of great value in their subsequent college work. It has supplied a unique opportunity for a close working relationship with a teacher and other students. The spirit duplicating machine is essential for making available copies of all chapters being written. Graff and Barzun, The Modern Researcher, plus supplementary readings from Allen Nevins, The Gateway to History are used as texts.

Informal evaluations of the effectiveness of this program are constantly made in order to modify procedures. However no formal information is available for distribution. Recommendations for others attempting to replicate this program are as follows:

- 1) The program is most effective with a group of ten to twelve students, so that they may be provided with maximum opportunity for both individual attention, and the experience of evaluating and learning from the work being done by others.
- 2) It should be kept in mind that when students are listening to criticism being directed at others they are mainly cognizant of how the points apply to their own work and what they can do to avoid similar errors - a much more effective approach than simply listening to a teacher's directions.

Further information may be obtained from:

Herbert S. Parmet
Mineola High School
Garden City Park, New York
Tel: PI 7-6700 Ext. 832

Mineola, New York

Instructional TV (I TV)

(English, Mathematics, Social Studies
Guidance, Science)

No Vocational areas at this time

The Instructional staff and TV Staff have
been involved in planning this program.

All district students,
K-12

Varies with specific
programs.

This program was planned to employ television to augment and/or expand instructional experience in ways uniquely possible through the medium. The operational rationale is to employ television to effect those materials and experiences that cannot be effected, or effected as well, without the use of T.V. On the part of the teachers, this necessitates early identification of purposes and resources in instructional planning. Thus, instructional T.V. has emerged as a catalyst in the overall approach to planning and teaching. Television is not a program as such; therefore its progress to date is best indicated in service terms. Variation in instructional application is achieved through scheduling broadcasts at the request of teachers by means of taped materials and video-tape recorders. Three supervisors, six department chairmen and teachers of English, Mathematics, Social Studies, Guidance and Science, as well as student teachers in the senior high school, are involved in implementing this program. A CCTV, 2,500 Megacycle Broadcast System has been used. Texts and resource materials have been determined by the particular disciplines.

For those wishing to replicate this program it is suggested that the instructional staff always be involved in an integral way in defining and supporting instructional objectives to be effected through television. A program of Instructional Television must exist within, and be necessary to, the instructional framework. If it is not operational in these terms, it will be an expensive 'side show' forever seeking purpose.

Evaluation of the program's effectiveness is achieved through subjective response from the teachers and staff. Evaluative information is best reflected in descriptions of purpose and content in specific programs. Further information may be obtained from:

Betty Smith
200 Emory Road
Mineola, New York
Tel: 516 - PI 7-6700 Ext 737

Mineola, New York

Physiology

General Biology - Chemistry
No vocational areas

15 students - 12th grade
Three years

This program was planned to achieve the following objectives:

- 1) To furnish the student with information about himself that will aid him in his daily life through the application of the principles of physiology and psychology in the fields of public health, nutrition, and a study of the effects of drugs and narcotics.
- 2) To provide a foundation for further professional training in fields of nursing, medicine and applied fields.
- 3) To provide an opportunity to become acquainted with more sophisticated equipment.
- 4) To teach the importance of patience, accuracy of observation and diagnosis of results through laboratory work.

This program has been in operation for nine years and is implemented by the department chairman. It has not been possible to accept all who apply because of costs of equipment and the lack of qualified instructors. Five Kymographs with attachments are used. Textbook of Physiology: Zoethout & Tuttle, plus the companion lab book, as well as Introduction to Psychology: Morgan and King are the textbooks used.

No formal evaluation has been attempted, but many graduates now in pre-medical and nursing programs have reported that the course was of great value. Recommendations for others attempting to replicate this course include the following:

- 1) Small classes.
- 2) No more than three students per Kymograph.
- 3) Students should be selected on the basis of interest and ability. (Usually those going into nursing or medicine are most interested.)

For further information contact:

Mr. Kenneth Cady
Mineola High School
Garden City Park, New York

Tel: (516) PI 7-6700

Mineola, New York

STEP

Guidance	20 Students, Grades 10-12
Machine shops, Electronics, etc.	One Summer
State personnel and administrative staff	

This program is specifically geared to assist potential dropouts. Essentially a work-study program with a great deal of group guidance and intensive individual guidance, the program is geared so that if a student drops out he will be better equipped to face vocational challenges. Many students who started three years ago will be graduated this year; several have already completed the program. The holding power has been phenomenal, and those who did leave school are currently employed. One teacher has been directly involved in implementing this program with indirect involvement of supervisors and department heads. Audio-visual aids have been used in the daily classes along with frequent discussions and compositions. A variety of printed materials from the Armed Forces, the State Department, Scope magazine and the textbook, English on the Job, have been used.

An evaluation of the program's effectiveness is underway and information will soon be available for distribution. Recommended for those interested in replicating the program is that the person selected to coordinate have a great deal of patience and empathy for students, an excellent relationship with teachers and administrators, and a working knowledge of vocational opportunities in the area.

Further information may be obtained from:

Dr. Henry Rosenbluth or Mr. Alfred Schulté
Mineola High School
Garden City Park, New York
Tel: PI 7-6700

Mineola, New York

Team Teaching Ninth Grade Normal and Fast English

English
No Vocational areas

100 Students - ninth grade
Two weeks

English teachers

This program has been planned to enable students to identify the techniques and characteristics of the major literary genres and to improve the students' written and oral expression. The department chairman, two teachers and two student teachers are involved in implementing this program. One teacher is responsible for literature, another for composition. They share four classes of approximately twenty-five students each. Because of greater flexibility in grouping, it is possible to devote more attention to individual problems and, consequently, develop greater self-reliance. Technological aids such as TV, records, film strips have been used. Extensive resources for literature are available. Composition 10: ed, Fleming and Glatthorn is the text.

An evaluation of the program's effectiveness is underway, but no information is available as yet for distribution. For others attempting to replicate this program, it is recommended that team teachers be scheduled to meet at least twice a week to plan and coordinate the program.

Further information may be secured from:

Dr. Joan D. Berbrick
c/o English Department
Mineola High School
Mineola, New York

Mineola, New York

TV Instruction of Calculus

Mathematics
No vocational areas

17 students - 12th grade
One month

Teacher and TV director have been involved in planning this program

This program provides TV instruction of Advanced Placement Calculus and attempts to identify and study problems encountered in the subject area, as well as the changed roles of teacher and student using this media. To date, the youngsters seem to be achieving at least as well as those in a conventionally taught class. Some problems have been satisfactorily solved while none appear so overwhelming as to be beyond the capability of those involved. In this setting students seem to develop greater self-reliance than usual. One combination department head and teacher has been involved in implementing this program, assisted by a TV director, secretary and technician. A TV tape recorder, transmitting equipment and receiver are the technological aids used as well as seventy six one-hour TV tapes provided by the Mineola School system. Calculus and Analytic Geometry: Thomas, Addison and Wesley is the textbook provided.

An informal evaluation of this program is currently underway, but no material is available for distribution at this time. Recommendations for others attempting to replicate this program are as follows:

- 1) Students need a written study guide as well as a thorough understanding of their instructional objectives.
- 2) The software is the critical element.
- 3) The series used should be edited.

Further information may be secured from:

Donald Holquist
Mineola High School
Armstrong Road
Garden City Park, New York 11044

Tel. (516) PI 7-6700 Ext. 834

Mineola, New York

Vocational Electronics

Math., Eng., Science (of Electronics)
Mech. Drawing, Electronics
Teachers of Electronics

48 Students, Grades 10-12
One Year

This program has been planned to prepare students for gainful employment in electronics, one of the major industries on Long Island since World War II. In addition to preparing the students for the FCC license exam and thereby for employment opportunities in marine communications and with the airlines, the course of study has been expanded to meet the demands created by the rapidly developing commercial and educational broadcasting branch of electronics. The program will include wiring assembling, testing, circuit analysis and designing. At present a detailed course of study is in preparation with equipment being selected. Tentative plans are in process for instituting a school-industry work experience program with students in the school's vocational laboratory assembling, wiring and testing, under school contract, electrical products for industry. At present, the principal, department chairman and two teachers are implementing the program. The F.C.C. Manual-Transmitter Experimental Circuits will be the text; technological aids will be used as required.

No evaluation is possible at this time, but further information for others attempting to organize a similar program may be secured from:

Mr. Herm Arnopol
Department Chairman
Mineola High School
Garden City Park, New York 11044

Mineola, New York

Vocational Industrial Cooperative Program

All disciplines applicable 50 Students, Grades 11-12
All industrial areas requiring vocational skills One Year
High School & Central Office Administrators, Vocational Advisory
Board & the Program Coordinator

The purpose of this program is to provide related vocational education not available in the school through part time employment during part of the school day. The New York State Department of Education has a Coordinators' manual for conducting this type of program. To date students, employers, parents, teachers and administrators have expressed satisfaction with benefits to students in the areas of career orientation and experience, better discipline and academic motivation. Employers find the program, directed by the coordinator alone, a good source for recruiting trainees and employees. Normal audio-visual aids, textbooks and resources are used as required.

An evaluation of the program's effectiveness is underway, and evaluative material is available for distribution. Recommendations for others attempting to replicate this program include the following:

- 1) Become aware of, and familiar with, other similar programs.
- 2) Discuss programs with others involved.
- 3) Be sure the coordinator knows the community and industry and has an understanding of teen-age problems.
- 4) Determine the needs of both the students and the industrial community.

Further information may be obtained from:

Mr. Joseph L. Besosa
Mineola High School
Armstrong Road
Garden City Park, New York
Tel: PI 2-6700 Ext. 753

Monroe, Michigan

Dental Assistant

No academic areas
Health Occupations

12-14 students in 12 year
Two years

Director, Teacher Coordinator, Members of the Dental Profession

The Dental Assistant program proposes to provide students with insight concerning a possible career as a dental assistant or dental hygienist, or in some other dental specialty. At the time of writing, this program has been in operation for five years, but lack of adequate financial compensation for trained personnel in this field has caused considerable attrition. Two supervisors, one department head, one teacher and two para-professionals are currently involved in implementing this program. Audio-visual aids, demonstration instruments and other technological aids are in use. In the Dentist's Office, G. Archanna Morrison; Effective Dental Assisting, Schwarzrock & Schwarzrock; and The Dental Assistant, Brayer and Richardson are the texts used for this course.

An evaluation of the program's effectiveness is currently being made, and results will be available for distribution by Spring, 1969. A major factor to be considered by anyone interested in replication of this program is comparative wages for people of equal skill. Further information may be secured from:

Kent B. Ackerman
Director of Vocational Education
1275 N. Macomb St.
Monroe, Michigan 48161
Tel. (313) 241-0330

Monroe, Michigan

Type A Special Education

English, Math, Government, American History	50 Students - Gr. 10-12
Domestic, Auto, Stock Clerks, Wood Shop	On-going

This program proposes to develop social and vocational competency. To date, two-thirds of the participants have been employed; one-sixth have been considered for exclusion; and one-sixth are involved in pre-vocational training. Two teachers are involved in implementing this program. E.E.C. Journal, Journal Mental Def. and Educational Research have been used as resource materials.

This program's effectiveness has been evaluated and material is currently available for distribution. Since no name was given as a reference, it is suggested that those interested in this program contact the ES '70 coordinator at Monroe, Michigan.

Monroe, Michigan

Vectors & Matrices & Probability

Mathematics - Vectors & Matrices & Probability 11 Students-12 Grade
No Vocational Areas 10 Hours
One Teacher

The purpose of this program is to return responsibility for learning to the student whose only requirement is to take the final examination. Homework and unit tests are optional while class time may be used in any way the student desires. For the most part, the students are ahead of last year's (apparently conventionally structured) class. They respond to the unstructured environment and will be exploring more topics than is usually the case. One teacher has been involved in implementing this program. SMSG Vectors and Matrices - Ball State Probability and Fifty Challenging Problems of Probability by Addison-Wesley have been used as texts. The full resources of the Mathematics School Library have been utilized.

An evaluation of the program's effectiveness is being made, but no material is available for distribution at this time. Before others attempt replication, however, every effort should be made to ascertain that the student have a complete awareness and understanding of the entire program especially in terms of his assignments and responsibilities. Great care must also be exercised in selecting material consistent with the student's ability.

Further information may be secured from:

Richard C. Potter
213 Arbor Avenue
Monroe, Michigan 48161
Tel: CH 2-2073

Portland, Oregon

AIDS
Advanced Individual Developmental Sequence

English
No vocational areas
Teachers, administrators, children

500 Students: Gr. 1-8
1½ years

This program was designed to provide language arts lessons specifically aimed at the special interests and needs of culturally disadvantaged youngsters in grades 1-8 of the Portland schools. A supplementary program (language arts) has been developed and is currently being used in eight schools. A product usability study is underway in these schools, under the direction of the Northwest Regional Educational Research Laboratory and the Portland Public Schools. The personnel involved are 3 supervisors, 3 department heads, and 18 teachers. Various resource books are in use. Other sources include Scott Foresman Rolling Readers, a Language Master and information from current research in language arts education (principally NCTE). While an evaluation of the program is underway, there is, as yet, no information available for distribution. It is recommended that others attempting to replicate the program contact Dr. Robert Rath at the Northwest Regional Educational Research Laboratory in Portland. Additional information may be obtained from:

Charles Boer
631 Northeast Clackamas St.
Portland, Oregon 97208
Tel: 234-3392 Ext 240 or 233

Portland, Oregon

Closed Circuit Television Project

Social Studies, English, Science, Phys, Ed. several hundred, Grades 9-12
Minimal participation of vocational depts. No time spent planning
Administrators & Teachers

An attempt is being made to adapt closed circuit television to the instructional program in its broadest sense, that is, to discover and develop those applications that cc TV can make more effectively than the conventional classroom approach. Application of the medium has begun in social studies, physical education and sports, English, drama and science. It has also been used for standardized testing, P.T.A. meetings, class meetings and announcements. A teacher-coordinator, social studies and biology teachers were involved in implementing the program. The district radio shop provided all technical assistance, and twelve student technicians are working with the crew. Various technical books and catalogues pertaining to equipment, as well as professional journals were referred to as needed. No evaluation of the program has been attempted.

Recommendations for others attempting a similar innovation include the following:

1. If specific purposes are similar, initially avoid too much pre-conceived structuring of the program.
2. Do not coerce staff into personal participation.
3. Emphasize repeatedly that the teacher is still the key factor.
4. Give ample opportunity for experimentation and exploration of the medium.
5. Keep equipment portable; don't begin without a video-recorder.

Further information may be obtained from:

Eugene C. Neubauer, Coord.
Wilson High School
1151 S.W. Vermont St.
Portland, Oregon 97219

Portland, Oregon

An Experiment to Develop Human Potential More Fully
Through a Four-Year High School Sequence in
Combined English and Social Studies

English & Social Studies 100 Grades 9-12
Vocational unit will be included each year 1 year
One Vice Principal; Four Teachers, Director of Educational Research

This program was designed to provide a classroom climate and environment in which the process of learning is accepted as being unique for each individual and not subject to standardization, and in which self direction is encouraged and diversity valued. Students are given ample opportunity to manipulate data, to discover principles for themselves, and to construct their learning according to their needs. Behavioral objectives have been put into well-defined segments; but they are still not all that is to be desired for storage in a computer. 1 Vice-Principal (Director of Research), 4 teachers, and 2 student teachers are implementing the program using regular ninth grade libraries supplemented by extensive use of paperbacks, periodical literature, filmstrips, recordings, and films for individual use by teachers.

Evaluation techniques and items are not ready for application but are to be developed in a proposed workshop this summer. Recommendations for others attempting to replicate this program include:

1. Develop minute behavioral objectives.
2. Saturate participants in learning theories and ASCD materials, etc. on individualizing instruction and personality development.
3. Develop a curriculum.

Further information may be obtained from:

Sue L. Bushnell
2735 N.E. 82 Avenue
Madison High School
Portland, Oregon 97220
Tel: 252-2421

Portland, Oregon

Interdisciplinary Power Mechanics

English, Science, Math
Industrial Education, Power Mechanics
Teachers

33 Grades 11-12
300 man hours

In order to encourage junior and senior high school potential drop-outs to remain in school, the students' interest in engines was used by the instructional team to motivate achievement in English, mathematics and science. Thirty three students started the program in Sept. 1967. Seven voluntarily dropped out in April; four were removed for general lack of academic interest. Twenty two remained. The program was judged to be successful because the school felt that seven more students would have dropped out had they not been in the program. Three Dept. Heads, one teacher, one para-professional and one student teacher were actively involved. Reference materials in the library and resource centers were used.

To date, there has been no formal evaluation of the program. The recommendations for those interested in establishing a similar program include the following: team meetings should take place weekly; weekly schedules should be outlined; courses should be highly structured and learning activities expanded.

For further information contact:-

Dr. Gaynor Petrequin
Marshall High School
3905 S.E. 91st St.
Portland, Oregon 97266

Portland, Oregon

Introductory High School Mathematics

Mathematics, Algebra
No vocational areas
Teachers

310 Students: Grades 9, 10
8 months

A new 9th grade introductory mathematics curriculum has been planned which will allow for individual differences and encourage maximum individual progress while still preserving the relationships inherent in a classroom situation. The course of study has been completed, except for a few tests, and revision for next year started. Procedures for assigning new units are being improved. Currently involved in implementing this program are 1 department head, 7 teachers, and 3 student teachers (for 1/3 of the year). No technological aides were employed. The following texts and resource materials were used:

Pearson-Allen, Algebra a Logical Approach - Bk. 1
MSG, Introduction to Algebra
MSG, Introduction to Secondary Math
Freelich, Algebra for Problem Solving, BK. 1
Temac, Miscellaneous Arithmetic texts
Temac, MSG

The program is being evaluated constantly through testing, although no information is available for distribution as yet. The only recommendation made for others attempting to replicate the program is that the school have a sufficient number of teachers available for the program.

For further information contact:

Mrs. Leo G. Stromquist
Jackson High School
2630 S. W. Taylor's Ferry Road
Portland, Oregon 97219

Portland, Oregon

Ornamental Horticulture - "Operation Green Thumb."

English, Science, Mathematics	70-Grades 11, 12
(Horticulture, Floriculture, Turf)	9 months preliminary
Advisory committee from industry	

This program was planned to prepare interested high school students for horticultural and floricultural occupations and for post high school training for those occupations in the field which require additional preparation. In the second year of operation, several students have already been placed in positions. In some cases pretests indicated academic deficiencies which needed immediate and concerted attention. Noticeable progress has been made, and student and community interest in the project has been very gratifying. Currently involved in implementing this program are: the director of vocational education, 3 teachers, 1 para-professional and 1 student teacher. An extensive collection of purchased and free materials was used as well as visual materials.

Evaluation of the program is underway, and information is available for distribution. It is recommended to others attempting to replicate this program that a competent advisory committee be secured. Employment opportunities should be determined beforehand and adequate facilities for classroom instruction provided. Related instruction should be co-incident with practical work.

For further information contact:

Mr. James C. O'Gara
Director of Voc. Ed.
631 N.W. Clackamas Street
Portland, Oregon 97208

Portland, Oregon

Pilot Program in English and Social Studies for Culturally Disadvantaged Poor Learners.

English, Social Studies, and
Mathematics, depending on school

400 students Gr. 9-11

2 months

(Part-time occupational experience at Grades
11 and 12)

The intent of this program is to provide relevant curriculum for disadvantaged youngsters in the areas of English and Social Studies (and, in some cases, mathematics) at the high school level. Objectives are stated behaviorally, with strategies for teaching, materials to be used and internal evaluation of objectives built into curriculum modules. Some 282 instructional modules have been written and distributed to 13 high schools in the Portland School System. Supplementing the academic disciplines is part-time occupational experience at grades 11 and 12. Currently involved in the implementation of this program are 3 supervisors, 10 department heads, 40 teachers, 8 paraprofessionals, i.e. teacher interns, and 10 student teachers. Additional consultants have been drawn from the Portland Public School System, and testing specialists from the Educational Testing Service. Curriculum is based on the needs of individual students encompassing communications services in English. Social Studies knowledge is based on the areas of economic efficiency as a consumer, social relationships, self-realization, employment possibilities and geography. Modules of instruction for teacher implementation, based on student needs, have been written by teachers.

Modules are currently being field tested, with teacher evaluation and comment sheets being utilized to determine their effectiveness and to indicate areas requiring revision. No information is available for distribution at this time, however, recommendations for others wishing to establish a similar program include the following:

- 1) School District Commitment.
- 2) Teacher involvement in establishing behavioral objectives.
- 3) Establishment of standards for identification of students to be included.
- 4) Usable evaluative instruments providing basis for revisions and extension of materials.

Contact:

Alvin H. Hulse, Coordinator
Portland Pilot Project for
Culturally Disadvantaged Poor Learners
Portland Public Schools
631 Northeast Clackamas Street
Portland, Oregon 97208

Tel: 234-3392, Ext. 306

Portland, Oregon

A Progressive Study in American History

History, English
No Vocational areas
Teachers

Grade 11
1-1½ years

A continuous progress program has been designed to allow students to work at their own pace. A one-to-one relationship between student and teacher is advocated to insure understanding. It was found that many students are eager to work, when given the opportunity. Some students have made exceptional progress. Several, in fact, progressed to the point where they insisted on aiding in evaluating slower students' work. One dept. head, one teacher and one para-professional were involved. They used standard textbooks, resource materials and tape recordings.

Although results are not yet available, an assessment of the program is in process. It is recommended that teachers be open minded about admitting that some innovation might be necessary if more students are to be reached. The establishment of definite goals for each class taught is considered an important prerequisite for this program.

For further information contact:

Dr. Gaynor Petrequin
Marshall High School
3905 S.E. 91 Street
Portland, Oregon 97266
Tel. - 775-4304

Portland, Oregon

Project CRAM and Performance Curriculum

Math
None
Teachers

Approx. 190 Grades 9-10
1 year

This was a pilot study in first year Algebra, using an individualized approach to instruction and including random testing of these individuals at different intervals throughout the year. While the program was progressing, it was found that more post testing was necessary, more reference materials were needed and that more efficient ways to present the material to the students should be found. Head of the mathematics dept. and teachers were involved. They used a Basic Text - Dolciani BK-I plus other basic Algebra texts. No technological aides were used.

Evaluation of the program is underway, but as yet no information is available for distribution. Recommendations for others attempting to establish a similar program include the following:

1. Mechanics of program implementation must be very well planned.
2. Test administration and materials are of utmost importance and must be thought out very carefully.

Further information may be obtained from:

Max Lane-Marshall High School
3905 S.E. 91 St.
Portland, Oregon 97266

Portland, Oregon

Self Concept and Career Development

English, Social Studies 2,300 Students, Grades 9-12
None 3 Summer workshops
Guidance Supervisors, Curriculum, vice-princ., counselors, vocational,
College coordinators.

This program was set up to aid students in making reasonable choices of avenues to post high school careers. Evaluation of the program is still largely subjective, based on written comments from students and verbal comments from members of the faculty. This is the problem area: all seem to approve of the program, but no method of assessing the results objectively have been evolved. Currently implementing the program are 1 supervisor, 2 department heads, and 32 teachers. The Portland Public School Curriculum publication "Self-Concept and Career Development," which includes Modules on every grade level, is used, as well as audio-visual media phonographs, dittos and thermofax.

Presently a tentative evaluation of the program's effectiveness is underway, and information is available for distribution. Recommendations for others attempting to replicate this program include the following:

- 1) The curriculum needs revision to suit the needs, interests and capacities of students.
- 2) The workload and distribution of time spent by counse should be evaluated.
- 3) Scheduling and sequence of the series have to be thought out carefully. For example, the presentation should be made to seniors at the very start of the year, in order that they have sufficient information in regard to military, vocational, academic testing, entrance exams, etc.

Further information may be obtained from:

Helen V. Mason, Career Development
Cleveland High School
3400 S. E. 26 Avenue
Portland, Oregon 97202

Portland, Oregon

Student Assistant Program

All disciplines involved
All vocational areas
Teachers and Counselors

895 Grades 9-12
2 years

This program was planned to provide opportunities for students to assume adult-type responsibilities and to share in decision-making processes. It also attempts to take advantage of the kinds of education that can take place in a student-to-student relationship. During the first year of the program 505 students were involved in all areas (classroom and non-classroom) of the school. The turnover of students was less than 10. All teachers continued in the program during the second year. Student enrollment was high again this year. The only attrition was due to transfer of students to the new high school. Involved in the program were 78 teachers. Neither technological aid nor resource material was used.

Evaluation has been completed and is available. Recommendations for others attempting to establish a similar program include the following:

1. Avoid rigid guidelines for teachers supervising student assistants.
2. The teacher assistant relationship should be entered and maintained by mutual agreement.
3. In order to facilitate "self-direction" the role of Student Assistant must be clearly defined.
4. Assistants should be given ample opportunity to work with others; assignment of menial chores is to be avoided.
5. Plan for a definite system of recognition and awards.
6. Involve students in decision-making processes. Indicate respect and concern for their feelings and ideas.

For further information contact:-

Eugene C. Neubauer, Coordinator
Wilson High School
1151 S.W. Vermont St.
Portland, Oregon 97219

Portland, Oregon

Survey Course in Electronics, Basic Electronics, Communication Electronics

No academic disciplines
Drafting

145 Students: Gr 9-12
2 years

This program was designed to offer students a general understanding of the function and identification of electric components. At the end of two years, all students received an "A" grade for completed work; however, most students received 1 unit of credit. Students in this school may receive $\frac{1}{2}$ unit, 1 unit, $1\frac{1}{2}$ units, or 2 units. One teacher, 2 para-professionals, and 1 student teacher are currently involved in implementing the program. Reference materials are available in the Resource Center. The program has been evaluated only through the use of a scattergram, and information is available for distribution.

It is recommended to those attempting to replicate the program that learning activities be expanded, that the administrative staff be committed, that the program be started on a small scale, and that ideas be exchanged with teachers and others involved in similar programs.

Further information may be obtained from:

Dr. Gaynor Petrequin
Marshall High School
3905 S.E. 91st Street
Portland, Oregon 97266

Portland, Oregon

Teachers Automated Guide (TAG)

Science	473 Grade K-4
No vocational areas	1 year
Computer Specialists, Curriculum	
Specialists, teachers, students	

TAG was instituted to develop and demonstrate a computer based program, which is intended to supply teachers with the curriculum and student information necessary for effective planning. These programs are in operation, but currently under revision. There are more than two hundred lessons in the curriculum file (Science K-4) and 11,000 student records. Teachers actively participating in the program accept it completely; two supervisors, seventeen teachers and six data processing people are involved. They used a computer with CRT-voice recorders as well as the following texts, resource materials: AAAS, ESS, MINNIMAST, SCIS, & Portland Developed Lessons.

To date there has been no evaluation of the program. It is recommended that the staff be kept very involved through released time and paid workshops, and that they have an effect on the system as it is developed.

For further information contact:

Dr. George Ingebo
631 N.E. Clackamas
Portland, Oregon 97208

Quincy, Massachusetts

Achievement Motivation (n Ach)

Academic Staff members	26 teachers - Graduate Level
No vocational areas	2 weeks
Q.H.S. staff, Harvard Univ. Behavioral Scientists, Development Research Assoc. Inc., Center for the Applied Behavioral Sciences	

This program was established in order to expose professional staff conscientiously to the self-learning process, to identify motivation techniques, to stimulate a research analysis of self through discussion with others. Half and full day discussion sessions as well as one overnight session have been held, with four more in the planning stage. Three of the participants are department chairmen, and one a supervisor. Technological resources are limited to game kits from the Center for Applied Behavioral Sciences. Source readings include:

non-published writings - Dr. Albert Altschuler
Life in Classrooms - Philip W. Jackson
The Process of Education - Jerome S. Bruner
Village School Downtown - Peter Schrag
Summerhill - A. S. Neill
Up the Down Staircase - Bel Kaufman
Talks to Teachers - William James
How Children Fail - John Holt etc.

For those interested in initiating a similar program, the following suggestion is made:

Indicate to some extent the structure of the course, the level of achievement anticipated, and the possible outcomes.

Further information may be obtained from these sources:

Lloyd M. Creighton, Principal
Quincy High School
Quincy, Mass. 02169
Tel. 471-4025

Mr. William Fitzhugh, Vice President
Development Research Associates, Inc.
183 Webster St.
Boston, Mass. 02148

Quincy, Massachusetts

AMDP

Achievement Motivation (n Ach)
Development Project

Psychology, Math,
No Vocational areas

200 Students: 9th Grade
6 Months

Univ. Personnel, Sup't of Schools, principals, teachers

The project was planned to find out the most effective methods of increasing achievement motivation to increase the long term level thereof among the course participants, and to develop appropriate course materials for wide spread use. Basic source material, based on Mc Clelland's well-known research, was prepared by Harvard University in the form of draft versions of a teacher's manual. The 10 teachers, 1 supervisor, and 6 para-professionals who implemented the project also used an overhead projector, tape recorder, 35 MM projector, a liquid duplicator and a mimeograph machine.

Evaluation is currently in process, with results not yet available for distribution. Recommendations for replication as well as additional information may be obtained from:

Dr. Alfred Altschuler
AMDP
13 Kirkland Street
Cambridge 38, Massachusetts
Tel: 617 - UN-8-7600 Ext. 3484
3485

Quincy, Massachusetts

Development and Evaluation of an Experimental Curriculum for the New Quincy Vocation-Technical School

Project ABLE

Math., Science, Soc. Studies, English 600 (next year 150): Gr. 7-12
Gen. Woods, Metals & Machines, 3 Years
Electro-Electronics, Gen. Pip., Foods, P.M.
Quincy teachers, AIR scientists, consultants

This is a joint research project of the Quincy public schools and the American Institute for Research, the principal goal of which is to demonstrate increased effectiveness of instruction whose content is explicitly derived from analysis of desired behavior after graduation, and which, in addition, attempts to apply newly developed educational technology to the design, conduct, and evaluation of vocational education. Included in this new technology are methods of defining educational objectives, deriving topical content for courses, preparation of students in prerequisite knowledges and attitudes, individualizing instruction, measuring student achievement, and establishing a system for evaluating program results in terms of outcomes following graduation. Implementing this program are 1 supervisor, 35 teachers, 4 para-professionals and 2 student teachers.

Procedure: The procedure begins with the collection of vocational information for representative jobs in eleven different vocational areas. Analysis is then made of the performances required for job execution, resulting in descriptions of essential classes of performance which need to be learned. On the basis of this information, a panel of educational and vocational scholars develops recommended objectives for a vocational curriculum which incorporates the goals of (a) vocational competence; (b) responsible citizenship; and (c) individual self-fulfillment. A curriculum is designed in topic form to provide for comprehensiveness, and also for flexibility of coverage, for each of the vocational areas. Guidance programs, considered extremely successful, and prerequisite instruction to prepare junior high students are important aspects of the program. Selection of instructional materials, methods, and aids, and design of materials, have been undertaken; they are now being revised, a process which has been seriously hampered by lack of staff and funds. An important step is the development of performance measures tied to the objectives of instruction. Methods of instruction are revised to make possible individualized student progression and selection of alternative programs. Teacher-training materials have been developed to accomplish in-service teacher education of Quincy School Personnel.

Program evaluation is in process, conducted not only in terms of end-of-year examinations, but also through follow-up studies after graduation. No information is available as yet for distribution. Recommendations for those interested in establishing a similar program include:

- 1) More staff and money.
- 2) A thoroughly well-equipped building.
- 3) Recruitment of professional writers for curriculum development.

For further information contact:

Joseph Nicastro
Quincy High School
Quincy, Massachusetts 02169
Tel: 617-773-0687

Quincy, Massachusetts

Developmental Economic Education Program (DEEP)

Social Studies	1966-7	2,300	
No vocational areas at present; to be included later.	1967-9	3,300	Gr. 1-6, 9, 12
	2 Years		

Supt., Joint Council in Econ. Ed.; New Eng. Econ. Ed. Council
social studies coord., principals, teachers

A co-operative project with the Joint Council on Economic Education and thirty school systems throughout the U. S. has been undertaken to:

- 1) Build economic understanding into school curricula at all grade levels.
- 2) Improve teacher preparation in economics.
- 3) Develop and evaluate new teaching materials at all grade levels.
- 4) Disseminate the results.

During the first year an in-service course was given in Economics on the elementary and secondary level. During the second year the program was implemented in two pilot schools. A curriculum guide entitled "It's Elementary - It's Economics" was formulated the first year and revised the next. The program has been implemented in 22 elementary schools in at least one classroom. Currently involved in the project are 3 supervisors, 2 Department Heads and 100 Teachers. Multi-media packages of the teacher produced guide, "It's Elementary-It's Economics" were used in each elementary school.

An evaluation of the program is underway, with results not yet available. The following recommendations were made for those attempting to replicate the project:

- 1) Read research and program development of the Joint Council in Economic Education. (1212 Ave. of the Americas, N. Y., N.Y. 10036)
- 2) Visit with DEEP school system closest to you.
- 3) Establish with staff a commitment to this kind of curriculum (relevancy is high, and children find it enjoyable).
- 4) Sketch out a program of goals with target dates. In-service programs are important so that staff may become familiar with economic concepts.
- 5) Prepare for implementation with multi-media packages.

For further information contact:

Carl R. Deyeso, Coordinator
Language Arts and Social Studies
Quincy Public Schools
Coddington Street
Quincy, Massachusetts 02169
Tel. No. 617-471-0100 Ext. 19

Quincy Massachusetts

Project PLAN

Eng. Math., Science, Social Studies	60 Grade 9
None	1 Year +
Teachers, Behavioral Scientist	

PLAN provides for learning in accordance with the needs, abilities and goals of the individual student by means of individualized "teaching-learning" units. The selection of these units and the evaluation of pupil performance are accomplished with computer assistance. Since Project PLAN is still in its infancy, constant revisions and improvements are being made. Material is being prepared for grades 7,8,10,11, and 12 which will be involved in the program within the next three years. Pupils are making substantial academic progress and are achieving skills in independent learning. Four teachers participated in the program. Computers and audio-visual media are used, as well as a wide variety of text books, periodicals, programmed materials.

The effectiveness of this program is being currently assessed, results of which are not yet available. Since the program is extremely sophisticated, it must be supported by a very strong organization. PLAN has been made possible by the research and development facilities of the American Institute for Research and Westinghouse Learning Corporation.

For further information contact:-
Mr. Robert E. Pruitt, Supt. of Schools
Quincy Public Schools
Coddington St.
Quincy, Mass 02169

Quincy, Mass.

Q-PED: Quincy Project for Educational Development

(Establishing a Climate for Change)

Professional Staff from
all disciplines

Quincy teachers and administrators,
Behavioral scientists

500 staff members
(all administrative staff
and a majority of the
teaching personnel)

6 months

Several years ago Quincy educators realized that their school system needed to change and that existing procedures for effecting change were inadequate. The Superintendent of Schools and the President of the Teachers Association turned to the behavioral sciences for help in creating a climate for change. Consultants were recruited from the Human Relations Center at Boston University, and financial assistance came from many sources: the Simons-Gutman Foundation, the school, QTA, and participants. The Quincy group then affiliated with the USOE-funded Cooperative Project for Educational Development (COPEd) initiated and coordinated by the NCL Institute for Applied Behavioral Science. Over a two-year period, 500 teachers and administrators in groups of not more than 50, selected by QTA, participated in a series of day-long seminars held on released time to consider the question, "How does a school system become a self-renewing social institution staffed by self-renewing individuals?" A two-day educational retreat followed the seminar series. During the summer several volunteer groups continued the dialogue. Two bi-weekly seminars, one for teachers the other for principals were also held. Resource material consisted of a suggested reading list and reprints of pertinent articles.

No evaluation of the program's effectiveness is underway, but evidence exists that the project has contributed significantly to establishing a climate for change. Unfortunately formal operation of the program has ceased this year because of a lack of funds. Those responsible for the program suggest the following requirements for replication: a full time director, a competent staff of behavioral scientists, and funding necessary to give the program consistency. For further information contact:

Arthur C. Gillis
Adams School Media Center
Quincy Public Schools
Coddington Street
Quincy, Mass. 02169

Tel. (617) 471-0100

San Mateo, California

Aerospace Program

Mathematics, Science, English
Preflight, Aerospace Lab.

38 (next year 100) Gr. 11, 12
3 years

Administrators, Consultants from industry, from secondary schools and colleges.

This program was created to meet the needs of students in a highly aviation-oriented county where one out of every eight working people is employed in some phase of the aerospace industry. Some objectives of the program are:

- (1) To enable students through an interdisciplinary approach to see an immediate application of their learning.
- (2) To teach fundamental knowledge and skills in mathematics, science, English, preflight and laboratory.
- (3) To begin the preparation of students vocationally in aerospace or related industries requiring extra knowledge and skills.
- (4) To prepare students for further training in aerospace in a technical institute, junior college, and/or college or university.

The pilot group of 38 average or better 11th and 12th grade students in one school will expand next year to 100 students from five other district schools. The new students will participate in the course described or in a special one-year Introductory Aerospace course which began as a motivational device for underachieving juniors and now includes the capable aviation-oriented students as well.

An interdisciplinary approach is central, with consultants being drawn from the aerospace industry as well as commercial and general aviation. Textual resources include Writing Practical English, Report Writing, Flight, Aviation in the Modern World, Technical Mathematics, Physics, an Exact Science, Basic Science for Aerospace Vehicles, NASA-FAA-CAP and NAEL materials.

Evaluation of the program is in Process, with results not yet available for distribution. Much of the program's success has been attributed to the teachers who must be willing to work as a team intensively with a cohesive unit of all male students. For specific details contact:

Robert D. Knees, Coordinator
Aerospace Program
Aragon High School
900 Alameda de las Pulgas
San Mateo, California 94402

Tel: (344-1194)

San Mateo, California

Automotive Services

No academic disciplines involved	22 Students, Grades 11-12
Auto Shop	1½ years
Automotive Instructor, advisors from Industry	

This is a pre-vocational training program designed to develop the students' skills to the level required for entry as apprentices in parts trade and service stations. The program is in full operation and in its second year, implemented by one supervisor and one teacher. Automotive Tune-up and Diagnosis by Wetzels, is in use as the basic text, in addition to a multitude of resource materials from industry. The program also employs ignition and charging system simulators.

Evaluation of the program is underway. To date, no information is available for distribution. It is recommended that staff members attempting to replicate the program, complete an actual dealer training program with an oil company and work under training conditions in an automotive parts store.

Further information may be obtained from:

Richard P. Ruppel
Aragon High School
900 Alameda de las Palgas
San Mateo, California

San Mateo, California

Composition Laboratory

All disciplines involving writing

All students-all levels

All areas, where composition is an important tool 3 Months

Department head & English teachers

A clinic was established where students-with writing problems could receive individual attention for extended periods of time from a well-trained composition specialist. To date, the clinic has accomplished a great deal for students who have made use of it. The problem has been to educate teachers and students concerning the value of the assistance which has been made available through this experiment. Very slow progress is being made in this area, which is a source of great disappointment. Two department heads, 5 teachers and 2 para-professionals were involved in the experiment. No texts, technological aids or resources were used.

Evaluation is under way, but a final assessment has not been made as yet. The following recommendations were made for those attempting to establish a similar center: Extensive advertising and publicizing must be carried on among teachers in subject fields other than English. If necessary, orientation tours of the laboratory should be conducted for teachers. However, the experiment is considered worthwhile and would be valuable in any school situation.

For further information contact:

Michael G. Callahan - Head of Eng. Dept.
Hillsdale H.S.
31 St. & Del Monte
San Mateo, California 94023
Phone:- 415 345-8255

San Mateo, California

(Burlingame High School)

English for the Foreign Born

Eng., Social Studies

No vocational areas

Principal, department head, teachers

28 students: Gr 9-12

1 year

This program was planned to provide students who have little or no mastery of the English language with enough skill so that they can function successfully in their classes. A small group was used in order to individualize the program as much as possible. Students who attained mastery of the language were transferred into the regular courses as soon as possible; those who needed additional special instruction remained until such mastery was attained. Technological aids included tape recorders, listening stations, and an audiovisual cart with headsets. Other resources were various texts, several geared to American history and culture, as well as workbooks, pronunciation guides and tapes. The program, implemented by 1 supervisor, 1 department head and 1 teacher, was considered successful enough to be continued indefinitely in the high school and expanded to several other schools in the district.

An evaluation of the program is underway, with information available for distribution. No recommendations have been made for others interested in initiating a similar program, but those interested should contact:

Mr. F. Umpleby
Burlingame High School
Burlingame, California
Tel: DI 4-1632

San Mateo, California

Humanities Laboratory

Soc. Studies, Art, Music, Eng., For. Lang.	75 Students min. Grades 10-12
No vocational areas	4 Years
One teacher	

A storage and retrieval system for the humanities has been established in which microcards, tapes, slides and other audio-visual materials are stored and retrieved by students. To date all material has been stored, and the laboratory is working; viewing machinery has been purchased but not yet completely installed. Electrical work and finishing touches are also needed and will be accomplished soon. Only one teacher has implemented the program, but other teachers are expected to participate as they find the need arising. Some 15,000 pages of material have been microfilmed, and the laboratory includes a great variety of other audio-visual materials.

An evaluation is planned for the future. No recommendations have been made, but those interested in this program should consult:

N. Friend
Capuchino High School
San Bruno, California
Tel: area code + 583-1221

San Mateo, California

Mathematics Laboratory

Mathematics
None
Teachers

125 Students: Grade 9
2½ years

The Mathematics Laboratory was set up to approach mathematics from a concrete, rather than an abstract, point of view. Work is done on projects involving objects, or tools of measurement, or calculation; arithmetic computation is considered secondary to the class activity. The Stanford Advanced Arithmetic Test (Parts 1-3) have been administered at the beginning of the course and will be repeated at the end of the course for comparison. Additional evaluation will be based on teacher observations and tests. Currently involved in implementing this program are 1 department head, four teachers, and 1 para-professional. Teachers have developed their own instructional material. Calculators, projectors and various measurement tools are employed extensively.

While there is no information available for distribution, an evaluation of the effectiveness of the program is underway. Others attempting to replicate this program should be aware of the fact that this type of class requires a great deal of time and originality in the development of materials. If the laboratory is to be used full time, classes must number less than twenty-five students. In order to work effectively in a program of this kind, teachers should be experienced and comfortable in a laboratory atmosphere. For further information contact:

Mr. Clifford E. Donley
Hillsdale High School
Del Monte and 31st Avenue
San Mateo, California 94403

San Mateo, California

Multi-Media Typing Lab

No academic areas	350+ Students: Gr. 9-12
Business Education	(planning time not indicated)
One department head using instructional material, assisted by technical services consultants and teachers.	

In order to accelerate the development of a usable typing skill for all students and a vocational skill for the students of average ability, an individualized program has been designed wherein optimum media for meeting performance objectives in typing, both Beginning and Advanced, may be determined. To date, a significant number of students are earning higher grades, and students in the Multi-Media Lab are achieving better skill in less time than students in regular typing classes. This comparison is made with similar schools in the district as well as with small-group control within the department. The program is being implemented by 1 department head, 5 teachers, and 1 student teacher. EDL, Mc Graw-Hill is in use as the text, supplemented by Southwestern Publishing Company typing materials and material prepared by the teachers. Technological aids employed in this program include: wireless listening stations - 4 track audio input, closed circuit television - 2 cameras, and color coded visuals for keyboard introduction.

Evaluation of the program is underway, and data are being statistically analyzed. It is recommended that others attempting to replicate this program provide ample time for the development of teacher-prepared materials and evaluation of student achievement. Further information may be obtained from:

Mrs. Lois A. Callahan
Business Education Department
Hillsdale High School
31st and Del Monte
San Mateo, California
Tel: 345-8255, Ext. 17

San Bruno, California

American Culture and Civilization

History, English, Art 56 Students-General Program, Grade 11
All areas of the community Daily-at least 2 hrs.
Teachers, teacher aide

This program is designed to aid the growth and development of students through a combined course of American Literature & U.S. History. It is a voluntary course, offered to acquaint the student with the historical cultural aspect of America. Since the students involved are not academically oriented, their attitude, at the beginning of the course tend to be unreceptive. However, with creative teachers, who have a willingness to try new methods, to experiment and "recruit", students begin to see the program's assets and begin to support it. The teachers, participating in the program, are gaining new insights into students potential assets, strengths, and weaknesses. With revision and suitable changes, the program continues to progress: involved in the program are 2 teachers and 1 para-professional. Audio-visual media and field trips are employed in implementing the program. No bound texts are used; but extensive use is made of paperbacks and a wide variety of resource material.

While an evaluation of the program is underway, no information is available for distribution. Recommendations for others attempting to replicate this program include the following:

- 1) Get complete and active support from departments, counselors and administrators.
- 2) Give team-teaching personnel in the program extra-time off and removal from the various "activities" programs of the school.
- 3) Have the program function in a school that has flexible scheduling or a method whereby the traditional school times are removed.
- 4) Be sure that the students in the program represent all levels of achievement and potentialities, rather than just one segment of the school population.

For further information contact:

Mr. George Kristovich, Principal
Crestmoor High School
300 Piedmont Drive
San Bruno, California 94066

San Bruno, California

Comprehensive Reading Laboratory

All academic disciplines
Industrial Arts, Homemaking
Teachers, administrators, consultants

app. 500 Students: Grades 9-12
3 years

The purpose of this program is to insure optimal reading and study skills improvement for every student in the school. It was hoped that all participants will reach at least the 9th grade-50th percentile reading level and that most will reach "much higher" levels. At the end of the first operational year, 85% of 360 students involved in the program did reach the goals set; 65% of the remaining 15% completed the required phase during the first semester of this year. Currently involved in implementing the program are 1 supervisor, 2 department heads, 23 teachers, 1 student teacher, and 6 student assistants. Various texts are in use.

An evaluation of the program is underway. Those wishing to replicate this program should plan careful task analyses, allow enough flexibility for constant re-planning and changing. Emphasis must also be placed on selection of materials, methods, and learning situations. For further information contact:

Don O. Dake
Capuchino High School
1501 Magnolia Drive
San Bruno, California 94066
Tel: 415-588-0209

San Bruno, California

FEAST

Foods Education and Service Training

Math., English
Home Economics, Business
Teachers

24 Students: Grades 11-12
5 Weeks

This project was planned to prepare students for entry positions in the food services industry. Training is geared to meet the needs and requirements of jobs covered by contracts with unions; civil service positions in city, county, state and federal institutions; State Department of Employment job specification, and university, college and school cafeteria positions. An important objective of the program is to provide a more meaningful educational experience for the vocationally oriented student. Since its inception, the students involved have shown a marked improvement in general scholastic achievement improved attendance at school and a definite decrease in discipline referrals have also been noted. A carefully prepared curriculum is presented and opportunities to work in the foods laboratories and school cafeteria are provided. Assisting in implementing this program are the District Cafeteria Supervisor, 3 department heads, 4 teachers, 1 para-professional, 1 counselor, and 1 co-ordinator. A variety of texts are in use supplemented by related resource material and the extensive use of field trips within the curriculum.

Evaluation of the program is underway and information is available for distribution.

Recommendations for others attempting to replicate this program include the following:

- 1) Orientation for entering students is desirable.
- 2) Sufficient pre-planning time must be allowed.
- 3) A team teaching planning period should be included in the schedule.
- 4) Selective counseling is advised.
- 5) Staff chosen to implement the program must be willing to work with students who, although they possess a full range of abilities, are vocationally oriented.

Further information may be obtained from:

William J. Kinnealy
Capuchino High
1501 Magnolia Dr.
San Bruno, California 94066
Tel: 583-1221

San Bruno, California

W.N.I.A.: Words and Numbers in Arithmetic

English, Mathematics
Crafts, Industrial Arts
Teachers, assistant teachers

54 Freshmen
3 Years

This program was established in order that basic math and English skills be learned through concrete activities. It also aims at strengthening the students self-image and educational attitudes. The program, now in its sixth semester and implemented by 3 teachers and 3 teacher aids, is considered successful. All materials used are improvized.

An evaluation of the effectiveness of the program is underway, and information is available for distribution. Recommendations for others attempting to replicate this program include the following:

- 1) A suitable physical setup is essential.
- 2) Our curriculum guides may be used by others.

For further information contact:

Cloyce C. Frazer
Crestmoor High School
300 Piedmont
San Bruno, California
Tel: 583-1480

Millbrae, California

Clothing Services (VEA)

Math, English & Economics
Home Economics, Business
Homemaking teacher

15 Students, Grades 11-12

The aim of this program is to enable the students to acquire skills and knowledge to meet the standards of performance required at the entry level for employment in the "needle-trades", specifically tailoring women's garment alterations, and women's garment fittings. The curriculum, also, includes discussion of the responsibilities and privileges of the employed. This program is in its second year, and in June of 1967 four students were graduated. One of these four is employed in an occupation using the skills acquired in this class. Of the members of the present class, two are currently employed part-time performing alterations for women's clothing stores. All of our students are earning income from individual clientele. Five students of the present class will seek full-time employment in the industry upon graduation in June of this year; these students qualify for entry level employment as Women's Garment Alterations Tailors. One teacher is implementing the program, using current periodicals and approximately 30 volumes of Women's Wear Daily.

Evaluation of the program is underway, but no information is available for distribution. In order to insure the success of this program, the instructor must have experience in the related vocational area. The project should be offered in communities where the students are oriented to service occupations and the population requires the service. The business community should be informed of the capabilities of students in performing a job that has characteristically been identified with older people.

Further information may be obtained from:

Mrs. Lois M. Carr
Mills High School
400 Murchison Drive
Millbrae, California 94030
Tel: OX 7-3344

Willingboro, New Jersey

CATV - School District Cooperative Effort

Eng., Sci., H.S. Equivalency, Gen.	20,000 Pre-school through Adult
Stenoscript (Adult Brush-up)	1 year
Curriculum, Production, Administrative	

Willingboro School District plans to develop video-taped lessons at the pre-school, in-school, and adult education levels to be transmitted via the local community antenna television channel. The local community channel has allocated "air-time" to the school district for its project, and preliminary planning is underway. There are 9 supervisors, 15 department heads, 50 teachers, and 4 student teachers implementing the program, using television production equipment.

No recommendations can be made since the program is still in the planning phase. Further information may be obtained from:

John Rosser, Admin. Ass't., Willingboro
Bd. of Education
Riker-Delaware Bldg.
Route 130
Willingboro, New Jersey 08046
Tel: (609) 877-7900

Willingboro, New Jersey

Innovative Usage of Educational Technology

Elementary Science, Secondary Soc. Studies, 3,500 Students Gr. 1-12
Sex Education

Planned use of video taping in One year

Administrators, Planning Assistants, Master Teachers, Consultants

Under an ESEA Title III grant the district is demonstrating the use of closed circuit television in an attempt to improve instruction through the production of live and video taped lessons. Areas of concentration include the development of:

- 1) Video taped elementary school science experiments, to be used as in-service training for teachers and as actual instructional lessons in the classroom.
- 2) Social studies video tapes: instructional lessons in economics Far Eastern Studies, communism, current events; and interviews with various members of the federal and state governments.
- 3) Video taped packages of teacher, parent and student presentations in the area of sex education to demonstrate an approach to introducing sex education into a community.

Planning included the development of PERT charts covering the four areas, in addition to the administration, production and evaluation segments of the project. Video tape production is underway with lessons and demonstrations in the areas mentioned and an in-service evaluation tape of teachers in the process of instructing. 9 supervisors, 15 department heads, about 50 teachers, and 4 student teachers are involved in presenting this program. Technological aids includes closed circuit television production equipment. In addition to consultants in the relevant fields, resources included enumerable written materials supporting the efforts of the consultants and staff.

Although evaluation procedures are being developed, no information is available for distribution as yet. Nor are there any specific recommendations at this time for other districts wishing to replicate this program.

For additional information consult:

John Rosser, Ass't.
Research & Program Development
Willingboro Board of Education
Riker-Delaware Bldg., Route 130
Willingboro, New Jersey 08046
(609) 877-7900

Willingboro, New Jersey

In-service Program - (High School Staff and Administrators of
Junior & Elementary Schools, PTA President, and Observers
from County & State Offices)

General background

50 Faculty Members

General

2 months

Secondary & Junior High School Teachers

Elementary School Administrators & PTA Observers

This program was planned to provide staff with background in the concepts of the ES'70 type curriculum and to act as a "test center" for in-service materials developed by General Program Teaching. The materials being used are presented to the participants in a slide-tape presentation. The monitor, Dr. Glenn Snelbecker of Temple University, attempts to relate the materials to the field of education. Dr. Snelbecker is also the prime evaluator, who conveys detailed feedback to the U.S. Office of Education and to General Program Teaching. The program is currently being implemented by 7 supervisors, 15 department heads and 30 teachers, using slide-type audio-visual equipment and a variety of texts relating to educational objectives.

The Human Use of Human Beings - N. Wiener

The Process of Education - J.S. Bruner

Toward a Theory of Instruction - J.S. Bruner

Taxonomy of Educational Objectives - B. Bloom

Tax. of Ed. Object. Handbook - Krathwohl

The Analysis of Behavior - J. Hollan & B. F. Skinner

Realms of Meaning - P. Phenix

Values and Teaching - Rath

An ongoing evaluation of the program is conducted at the conclusion of each session. A knowledgeable teacher-monitor has been an asset to the Willingboro Program and would probably be important to other programs.

Further information may be obtained from:

John Rosser, Admin. Ass't, Research & Program Development
Willingboro Board of Education, Route 130
Willingboro, New Jersey 08046
Tel: (609) 877-7900

Willingboro, New Jersey

National Science Foundation In-Service & Pilot Program

Science-Elementary School

No Vocational areas

Elementary School Teachers & Administrators

900 Students, Grades 1,2,3.

6 Weeks

During the summer of 1968 primary grade teachers are to be involved in a training program at Glassboro State College. During the 1968-69 school year, these teachers will conduct pilot programs using the discovery method for teaching science. Planning and selection of teachers to be involved will be carried out in conjunction with the college. Thirty elementary school teachers and 3 supervisors will participate in this program, and will use the following materials:

Video-taped demonstration lessons

T.V. production equipment

SCIS Materials

Video-taped demonstrations.

Plans for evaluation of this project are being developed.

Further information may be obtained from:

John Rosser, Admin. Asst.
Research and Program Development
Willingboro Bd. of Ed.,
Riker-Delaware Building, Rt. 130
Willingboro, New Jersey
Tel: 609 - 877-7900

Willingboro, New Jersey

Outdoor Education Program

All disciplines: Elementary Level	90 Students - Grades 5-6
No vocational areas	1 year
School and college administrators, curriculum directors	

This program initially involved pilot groups of youngsters who attended the Outdoor Education Center for a three or four day period. These groups were part of the planning and demonstration phase of the program which resulted in funding for the operational phase currently in full swing. The program is being implemented by 1 Supervisor, 1 department head, and 2 teachers. A text was not used; science materials related to outdoor education were employed extensively.

An evaluation of this program has been made, and more specific information may be obtained from:

John Rosser, Administrative Assistant
Research & Program Development
Willingboro Board of Education
Riker-Delaware Building
Rt. 130
Willingboro, New Jersey
Tel: 609 - 877-7900

Willingboro, N.J.
Pilot Television Project in Sex Education

1,600 Students Gr 5 - 12

Administrators, Planning Assistants, Master Teacher, Consultants

As one segment of an ESEA Title III project, this program was instituted as a pilot approach to introducing sex education into a school district. The plan calls for the presentation of introductory lessons for children, parent group presentations, and teacher in-service presentations - all to be videotaped in conjunction with the Title III TV project. These pilot lessons and group meetings will be conducted by Dr. Steven Homel who had conducted similar programs as a consultant to Upper Darby, Philadelphia and Phila. Suburban School Districts. Age and maturation level of the students determine the content of the lessons with 32 demonstration lessons for both large groups of 300 pupils and classroom size groups of 35. The teaching method is the inductive conceptual approach. Orientation meetings were held for parents whose children are included in the program. At the completion of Phase one of the Pilot Project, the project staff plans to have a visual pattern of the introduction of sex education as it actually occurred with a pilot group of children. This pattern can serve as a guide for the Willingboro District and other districts for the introduction of sex education programs, moreover, materials will be available with which to develop teacher in-service training programs in sex education.

Additional resources included in the demonstration lessons are as follows:

5th - Human Heredity, World of a Girl

6th, 7th, 8th - Human Heredity, Girl to Woman, Boy to Man

9th, 10th - Human Heredity, Human Reproduction, Drugs and Nervous System

11th - A Quarter Million Teenagers

12th - Human Heredity, Human Reproduction, Phoebe, Drugs and Nervous System

Evaluation of the project is planned, results of which will be available at a later date.

For additional information contact:

John Rosser
Administrative Ass't.
Research and Program Development
Willingboro Bd. of Education
Riker Delaware Bldg.
Route 130, Willingboro, New Jersey 08046

Tel. (609) 877-7900